3.25 Cumulative Impacts

3.25.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial, impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA), can be found in 40 Code of Federal Regulations (CFR), Section 1508.7 of the Council on Environmental Quality (CEQ) Regulations.

3.25.2 Methodology

Construction and operation of any of the MCP Build Alternatives would result in direct and indirect impacts that could contribute to cumulative effects to the built and natural environments when combined with other related past, present, and reasonably foreseeable future actions.

Cumulative impacts were identified by considering the impacts of the proposed MCP project and other past, current, or proposed actions in the area to establish whether, in the aggregate, they could result in cumulative environmental impacts. Both direct and indirect impacts are assessed. Past actions that have most affected resources of

concern and land uses in western Riverside County include the area's transformation from rural to urban/suburban communities; public works projects such as flood control, and utility infrastructure projects; and the development of the state and interstate highway systems, as well as a network of county and city roads, to support the developing communities.

This cumulative effects analysis focuses on those issues and resources that would be affected by the aggregation of stress factors on the environment and does not address in detail those topics that would not have additional environmental effects from the cumulative condition. The analysis provided in this section considered the effects of the other projects and the MCP Build Alternatives in assessing whether cumulative adverse impacts would occur to resources of concern or to sensitive land uses. Specific geographic boundaries for cumulative effects were determined for each environmental topic analyzed and vary accordingly. In most cases, the cumulative study area for the MCP Build Alternatives is the MCP study area; however, some topics have larger or smaller areas of assessment due to the sensitivity and/or extent of the resource.

Future actions anticipated to occur include further growth within the county and incorporated city areas, continuing the conversion of rural lands to urban and suburban developed conditions. The growth will require continued expansion of supporting infrastructure, such as roadways, commercial uses, public services, and utilities. As discussed previously in Section 3.2, Growth, the anticipated growth is reflected in the regionally adopted growth projections and is planned for in the Riverside County (County) General Plan and the General Plans of affected cities.

The following eight steps serve as guidelines for identifying and assessing cumulative impacts and are based on the *Guidance for Preparers of Cumulative Impact Analysis* (June 2005, Caltrans).[1]

1. Identify the resources to consider in the cumulative impact analysis by gathering input from knowledgeable individuals and reliable information sources. This process is initiated during project scoping and continues throughout the NEPA/ CEQA analysis.
2. Define the geographic boundary or Resource Study Area for each resource to be addressed in the cumulative impact analysis.

[1] http://www.dot.ca.gov/ser/cumulative_guidance/downloads/ Approach_and_Guidance.pdf; site accessed on September 7, 2011.

3. Describe the current health and historical context of each resource.
4. Identify the direct and indirect impacts of the MCP project that might contribute to a cumulative impact on the identified resources.
5. Identify a set of other current and reasonably foreseeable future actions or projects and their associated environmental impacts to include in the cumulative impact analysis.
6. Assess cumulative impacts.
7. Report the results of the cumulative impact analysis.
8. Assess the need for mitigation and/or recommendations for actions by other agencies to address a cumulative impact.

As discussed in this section, citations to the MCP Build Alternatives should be interpreted to include Alternative 4 Modified, Alternative 5 Modified, Alternative 9 Modified, and the preferred alternative (Alternative 9 Modified with the SJRB DV).

Several agencies and organizations noted cumulative impacts as an area of concern during the scoping process for the MCP project. In addition, comments received on the Draft EIR/Draft EIS (for the 32-mile MCP facility), the Recirculated Draft EIR/Supplemental Draft EIS, and the "Recirculated Sections of Chapter 4.0 (III, Air Quality; VII, Greenhouse Gases; 4.5, Climate Change; and Table 4.10, also cited cumulative impacts as areas of concern. However, many of those comments simply cited concerns about cumulative impacts without specifying a particular environmental parameter. Other comments noted concern regarding specific parameters for which the MCP Build Alternatives might contribute to cumulative impacts. As described in this chapter, the environmental parameters evaluated in Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures, were assessed to determine whether the MCP Build Alternatives would contribute to or result in cumulative impacts on those resources. As discussed in Section 3.25.3, the following resources discussed in Chapter 3 were evaluated in Section 3.25.5 to assess the potential for the MCP Build Alternatives to contribute to or result in cumulative impacts to those resources:

- Growth-related effects
- Farmlands/timberlands
- Community impacts/relocations
- Visual/aesthetics
- Cultural resources
- Paleontology

- Natural communities
- Wetlands and other waters
- Plant species
- Animal species
- Threatened and endangered species

The following resources considered in Chapter 3 were evaluated, and it was determined that the MCP project would not contribute to cumulative effects or that the effects evaluated in Chapter 3 were already analyzed in a cumulative context:

- Land use
- Consistency with state, regional, and local plans
- Parks and recreation
- Environmental Justice
- Utilities/emergency services
- Hydrology and floodplains
- Water quality
- Traffic and transportation
- Geology, soils, seismic, topography
- Hazardous waste and materials
- Air quality
- Climate change
- Noise
- Energy

3.25.3 Identification of Resources/Issues to Consider for Cumulative Impacts

As discussed in Sections 3.1 through 3.22 of this EIR/EIS, the MCP project would cause direct or indirect impacts to a number of resources in the human, physical, and natural environments; therefore, many of the resources discussed in the previous sections were considered in the analysis of cumulative impacts, including:

- Growth-related effects
- Farmlands/timberlands
- Community impacts/relocations
- Visual/aesthetics

- Cultural resources
- Paleontology
- Noise
- Natural communities
- Wetlands and other waters
- Plant species
- Animal species
- Threatened and endangered species

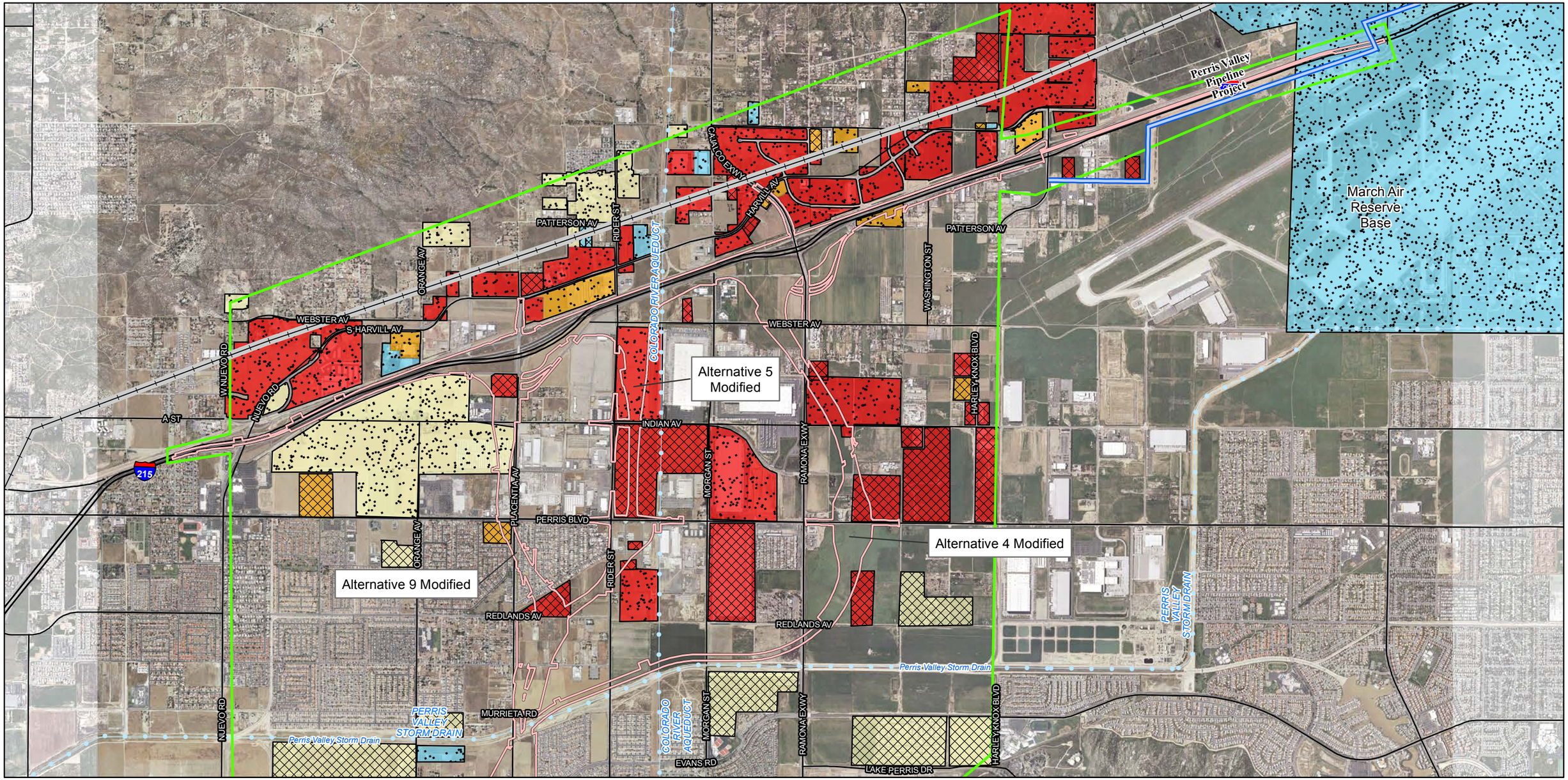
Those resources for which cumulative effects are not anticipated or for which the impacts were already analyzed in a cumulative context are briefly discussed below. Discussion of cumulative impacts to the resources listed above are provided later in Section 3.25.5, Environmental Consequences.

- **Land Use.** Because of the ongoing process initiated under the Riverside County Integrated Project (RCIP) in 1999 to coordinate the planning of Community and Environmental Transportation Acceptability Process (CETAP) corridors (including the MCP project, which was the Hemet to Corona/Lake Elsinore CETAP corridor) with existing and future land use in western Riverside County, no adverse cumulative impacts related to land use are expected. Future land development will be implemented in a manner that is consistent with adopted land use and resource conservation plans, and local agency General Plans will be amended to reflect the approved MCP route alignment and facility type.
- **Consistency with State, Regional, and Local Plans.** The evaluation of plan consistency is considered a project-related evaluation and is discussed in Section 3.1.2 of this EIR/EIS. The state, regional, and local plans reviewed for this evaluation provide a broader planning context for the MCP project. The MCP Build Alternatives would require amendments to the County and City General Plans to reflect the final MCP alignment, and interchange locations, and to change the land use designations on property that would be acquired for the project to a transportation or public use designation.
- **Parks and Recreation.** As discussed in Section 3.1.3 of the EIR/EIS, no parks or other recreational areas would be permanently impacted by the MCP project.

  Several recreational trails in the cities of Perris and San Jacinto and in unincorporated Riverside County are bisected by the MCP project. However, the MCP project will be designed so that these bike routes and trails can use the planned overcrossings and undercrossings to cross the MCP project facility.

Therefore, after project completion, access to the trails would be restored and trail connectivity on both sides of the new MCP facility would be provided. Trails are planned as part of the County and City General Plan Land Use Elements; therefore, build out of the future land uses and other cumulative projects would not result in impacts to existing or planned trails. Most of the cumulative transportation projects consist of improvements to existing roadways and freeways, which would limit impacts to trails that cross existing or planned roadways and freeways.

- **Environmental Justice.** As discussed in Section 3.4.3 of this EIR/EIS, the MCP project would result in impacts that will be borne by all communities in the MCP study area, including minority and low-income populations, and mitigation measures have been identified to reduce these potential impacts. As discussed in Section 3.4.3, FHWA has made the determination that Alternative 4 Modified and Alternative 9 Modified would not have disproportionate impacts to environmental justice populations, while Alternative 5 Modified would have disproportionate impacts to environmental justice populations because of that Alternative's displacement of major employers (large intermodal warehouses) that may be difficult to relocate within the MCP study area. The cumulative projects shown in Figure 3.25-1 would not result in additional displacement/relocation impacts to major employers in the MCP study area; therefore, they would not contribute to a cumulative adverse effect to environmental justice populations.
- **Utilities/Emergency Services.** As discussed in Section 3.5 of this EIR/EIS, the MCP project would not result in adverse effects to utilities and emergency services, except for short-term effects during construction. Because the MCP project would not adversely affect utilities, it would not contribute to cumulative adverse effects to utility facilities and providers.
- **Hydrology and Floodplains.** As discussed in Section 3.9 of this EIR/EIS, although the MCP project would encroach on floodplains, it would result in a minimal change in the capacity of the San Jacinto River and the Perris Valley Storm Drain to carry water. Cumulative land use and transportation projects would comply with the San Jacinto River Area Drainage Plan (Riverside County Flood Control and Water Conservation District, 1987), as well as the applicable Riverside County and Cities of Perris and San Jacinto General Plan safety policies to reduce flooding and ensure the storm drain systems have sufficient capacity to accommodate any increase in storm flows due to increased impervious surfaces and runoff. In addition, the local jurisdictions review all projects on a case-by-case basis to ensure that sufficient local and regional drainage capacity is



LEGEND

- Limits of Proposed Improvements (All Alternatives and Design Variations)
- MCP Study Area
- Perris Valley Pipeline Project
- Proposed Perris Valley Rail Extension
- Perris Valley Storm Drain and Colorado Aqueduct

Development by Type

- Commercial
- Industrial
- Residential
- Other

Development by Status

- Application Submitted
- Project Approved

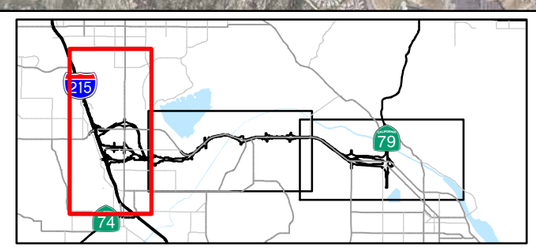


FIGURE 3.25.1
Page 1 of 3

SOURCE: Jacobs Engineering (02/2011); Thomas Brothers (2010); SCAG (2005); Eagle Aerial (3/2010)

0 0.25 0.5 Miles

Cumulative Projects

08-RIV-MCP PM 0.0/16.3; 08-RIV-215 PM 28.0/34.3
EA 08-0F3200 (PN 0800000125)

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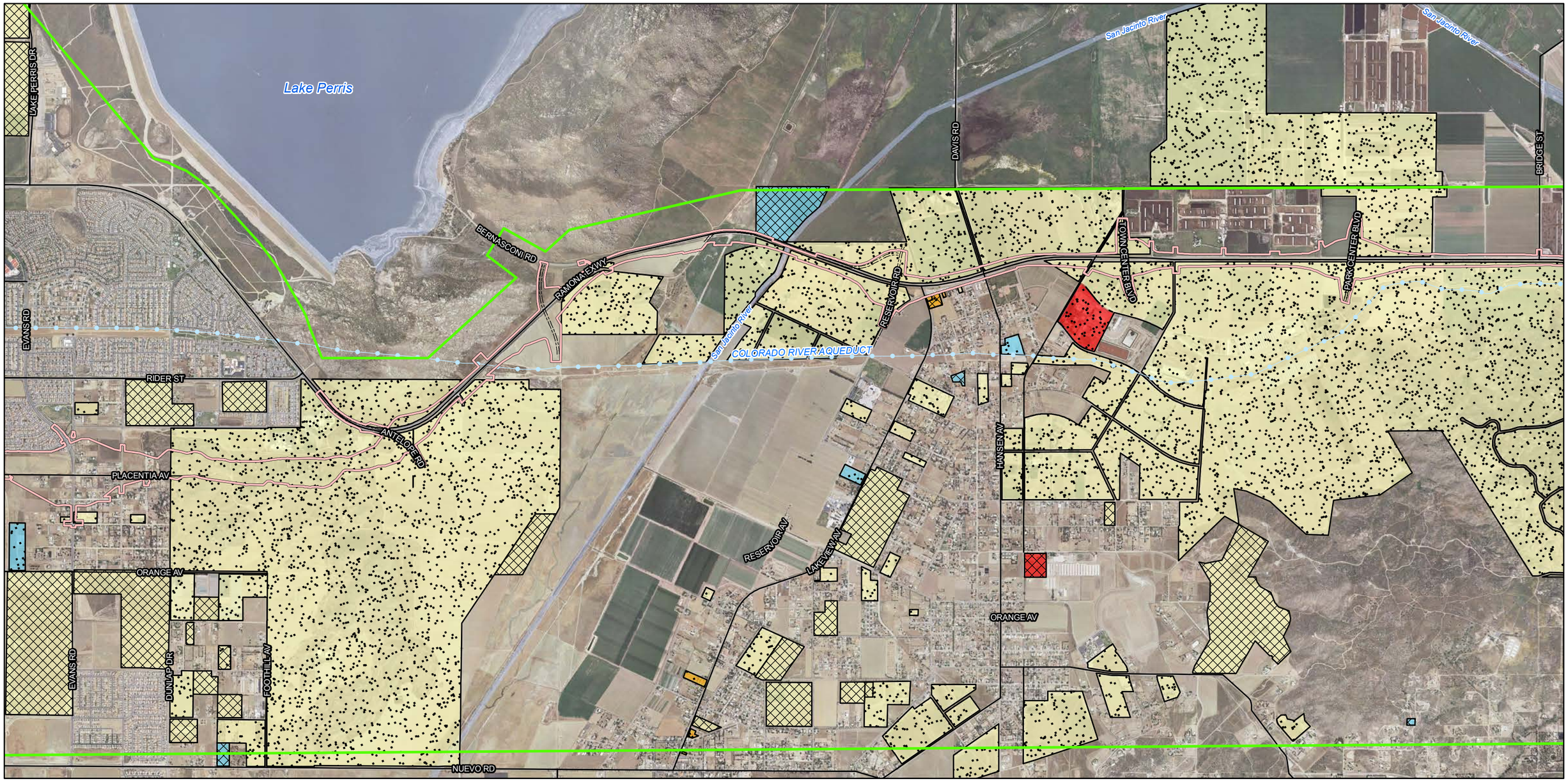

LEGEND

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SOURCE: Jacobs Engineering (02/2011); Thomas Brothers (2010); SCAG (2005); Eagle Aerial (3/2010)

0 0.25 0.5 Miles

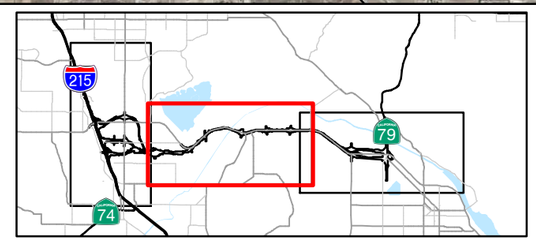

FIGURE 3.25.1
Page 2 of 3

Cumulative Projects

08-RIV-MCP PM 0.0/16.3; 08-RIV-215 PM 28.0/34.3
EA 08-0F3200 (PN 0800000125)

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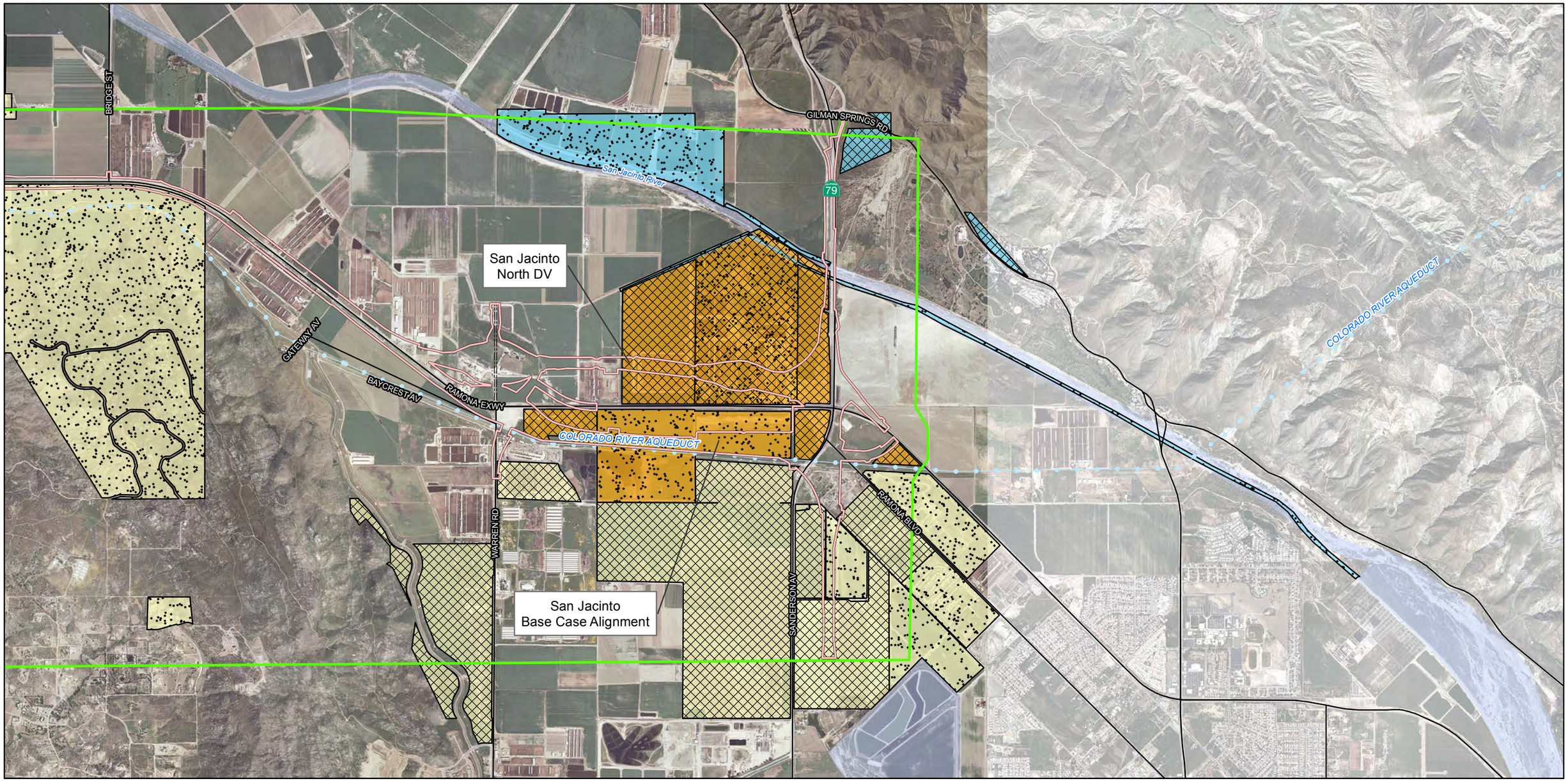

LEGEND

- Limits of Proposed Improvements (All Alternatives and Design Variations)
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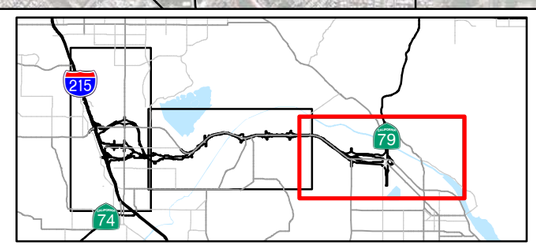

SOURCE: Jacobs Engineering (02/2011); Thomas Brothers (2010); SCAG (2005); Eagle Aerial (3/2010)

0 0.25 0.5 Miles

FIGURE 3.25.1
Page 3 of 3

Cumulative Projects

08-RIV-MCP PM 0.0/16.3; 08-RIV-215 PM 28.0/34.3
EA 08-0F3200 (PN 0800000125)

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available. Therefore, the MCP project would not contribute substantially to cumulative adverse effects related to hydrology and floodplains.

- **Water Quality.** As discussed in Section 3.10 of this EIR/EIS, the MCP project would not result in adverse effects to water quality. Cumulative land use and transportation projects would be required to comply with National Pollutant Discharge Elimination System (NPDES) requirements and to implement water quality Best Management Practices (BMPs) at the time of development and, therefore, would not contribute to a cumulative adverse effect to water quality.
- **Traffic and Transportation.** As discussed in Section 3.6 of this EIR/EIS, the MCP project would not result in adverse effects to traffic circulation in the MCP study area, except for short-term effects during construction. The MCP project would have a beneficial effect by improving regional and local mobility. The analysis of future traffic conditions in the 2040 design year is a cumulative analysis in that it considers traffic generated by future planned land uses and the effect of future planned transportation improvements that were accounted for in the RIVTAM traffic noted in 2011, which is when the traffic model was run. Of the transportation and land development projects noted in this comment, only the World Logistics Center was not included in the MRP traffic forecasts, because the NOP for the World Logistics Center development was issued by the City of Moreno Valley in February 2012.
- **Geology/Soils/Seismic/Topography.** As discussed in Section 3.11 of this EIR/EIS, any adverse effects of the MCP project to geology, soils, etc., are localized and limited to within the grading limits of the project. While other projects would impact the geology at their project sites, the impacts would be localized and not impact regional geology; therefore, the impacts of the MCP project would not contribute to cumulative adverse effects to geology.
- **Hazardous Waste and Materials.** As discussed in Section 3.13 of this EIR/EIS, implementation of the MCP project would not result in a substantial permanent adverse impact related to hazardous waste and materials. Future land use and transportation projects would comply with the County of Riverside Hazardous Waste Management Plan and the applicable local jurisdictions' General Plan policies related to hazardous materials, which would ensure that there would be no adverse hazardous material impacts resulting from future development in Riverside County and the cities of Perris and San Jacinto.
- **Air Quality.** The analysis of air quality provided in Section 3.14 of this EIR/EIS is a cumulative analysis in that it considers the emissions of traffic generated by future planned land uses and the effects of other future planned transportation

improvements. As discussed in Section 3.14, the Build Alternatives would help to improve traffic flow and reduce congestion on road links in the project vicinity. The MCP project would not contribute to cumulative air quality impacts because it would not violate any air quality standard, would not contribute substantially to an existing or projected air quality violation for carbon monoxide (CO), particulate matter less than 2.5 microns in size ($PM_{2.5}$), or particulate matter less than 10 microns in size (PM_{10}), would not result in an adverse impact related to Mobile Source Air Toxics (MSATs) or air toxics, and would not expose sensitive receptors to substantial pollutant concentrations.

- **Climate Change.** The CEQA analysis in Chapter 4 of this EIR/EIS contains a discussion of the impacts of the MCP project with regard to climate change. As discussed in Chapter 4, although the MCP project would improve the regional traffic flow, it would also increase the total regional vehicle miles traveled. Therefore, the MCP project would result in a small increase (less than 1 percent) in carbon dioxide (CO_2) emissions within the region in 2020 and 2040 when compared to the 2020 and 2040 without project conditions. As discussed in Section 4.5.1.6, CEQA Conclusion, it was concluded that the majority of air quality emissions associated with the MCP Build Alternatives would be generated by on-road vehicles. Because RCTC does not have the legal authority to control on-road vehicle emissions, there are no measures that can be implemented by RCTC to reduce that impact to less than significant under CEQA. In addition, RCTC lacks the land use authority to construct off-site greenhouse gas emissions (GHG) reducing facilities, such as solar or wind farms, capable of offsetting some or all of the project's GHG emissions. Therefore, the MCP Build Alternatives would result in a substantial adverse impact due to generation of GHG emissions.
- **Noise.** The analysis of noise impacts provided in Section 3.15 of this EIR/EIS is a cumulative analysis in that it considers the traffic noise generated by future planned land uses and the effects of other future planned transportation improvements on the noise environment. As discussed in Section 3.15, the MCP would contribute to cumulative noise impacts because, under all MCP Build Alternatives, sensitive receptors would still be exposed to noise levels exceeding the Noise Abatement Criteria (NAC) even after implementation of noise barriers.
- **Energy.** The analysis of energy impacts provided in Section 3.16 of this EIR/EIS is a cumulative analysis in that it considers the energy usage of traffic generated by future planned land uses and the effects of other future planned transportation improvements on regional energy consumption. As discussed in Section 3.16, the Build Alternatives would result in a slight increase in indirect energy

consumption (a 0.43 percent increase) in the MCP study area compared to the No Build Alternatives. Because this increase is minimal, the MCP project's contribution to cumulative energy impacts would not be considerable.

3.25.4 Identification of Cumulative Plans and Projects

This section identifies the adopted plans and related projects that may, in concert with the MCP project, have a cumulative adverse effect on resources of concern and sensitive land uses in the MCP study area and western Riverside County. Adopted plans that will direct future growth, development, and open space preservation include the Riverside County General Plan, the General Plans of the two study area cities—Perris and San Jacinto—and the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). In the following discussion, historical land use trends are examined along with recent development proposals and transportation projects in the MCP study area.

3.25.4.1 Riverside County General Plan

Overview

The Riverside County General Plan was adopted in 2003 and updated in 2008 and provides policy direction and permitted land use intensities for future development in the unincorporated areas in the county. The General Plan was developed as part of the RCIP, a three-part regional planning effort that also included the MSHCP that guides the preservation of natural open space areas to provide habitat and linkages for protected species. The third component of the RCIP was the intra- and inter-county transportation planning effort known as the CETAP, which identified regional transportation facilities needed to support the General Plan land uses. The MCP project is a segment of the east-west, intra-county CETAP transportation corridor, previously known as the Hemet to Corona/Lake Elsinore corridor.

The General Plan is intended to help guide Riverside County in achieving an integrated and coordinated land use plan, habitat conservation plan, and transportation system. Central to the vision for Riverside County is the desire to maintain and enhance the character of Riverside County, including its natural resources and unique communities, by clearly defining areas suitable for future growth and those suitable for preservation and maintenance. Key to this goal is the need to focus future growth into a pattern that complements and incorporates the transportation and multipurpose open space systems. The General Plan directs future growth to areas that are well served by public facilities and services, and preserves important environmental

features such as drainage ways, lands subject to extreme natural hazards, or lands that offer scenic beauty.

Land Use

The General Plan land use designations and applicable area plan policies for the unincorporated county areas in the MCP study area reflect and implement the basic tenets of the General Plan described above. The primary planned community centers in the MCP study area are the two incorporated municipalities: the City of Perris in the western part of the study area and the City of San Jacinto in the eastern part of the study area. These cities are located in areas where the MCP project will connect with interstate or state highways. Multipurpose open space opportunities in the MCP study area consist of multiple county and city parks and school playgrounds. (See Section 3.1 of the EIR/EIS for more information about recreation resources.) In addition, biological conservation areas are provided for in the existing Western Riverside County MSHCP and the Habitat Conservation Plan for the Stephen's Kangaroo Rat managed by the Riverside County Habitat Conservation Agency (RCHCA), and through additional preservation as a result of the MSHCP, which is described in more detail below in Section 3.25.4.3.

Much of the unincorporated part of Riverside County is divided into 19 area plans. The purpose of these area plans is to provide more detailed land use and policy direction regarding local issues such as land use, circulation, open space, and other topical areas. The four area plans in the MCP study area are Mead Valley, Lakeview/ Nuevo, San Jacinto Valley, and Reche Canyon/Badlands and are described in Section 3.1 of this EIR/EIS.

3.25.4.2 General Plans of Affected Cities

City of Perris

The City of Perris updated five of the seven mandatory General Plan Elements in 2006. The other two sections were updated in 2008 and 2010. The MCP study area transects the northern portion of the city in City of Perris Planning Areas 1, 2, 3, 4, and a portion of 5. The plans for these areas, as expressed in the Land Use Element, include a development pattern that is consistent with existing land uses and infrastructure. For example, air cargo-related uses are proposed near the March Air Reserve Base "Inland Port;" residential uses are proposed to continue in the area adjacent to the Lake Perris State Recreation Area; the continued residential and retail/ commercial core is proposed for the central city area; and business park development is proposed along Interstate 215 (I-215). A conversion of agricultural land to light

industrial and distribution center uses is planned along the I-215 corridor. Between 2000 and 2010, the population of the city of Perris doubled, from 36,189 to 68,386. It is projected to increase by an additional 80 percent by 2035. There is 64 percent of land designated in the General Plan for residential use remaining for development. Similarly, large tracts of vacant land in the city are designated for employment-generating uses. Much of this vacant land has already received approvals for development or is in the entitlement process.

City of San Jacinto

The city of San Jacinto encompasses an area of approximately 27 square miles (sq mi) and had a population of 23,779 in 2000. The City of San Jacinto General Plan (2006) promotes the preservation of natural and historic resources while allowing a range of land uses including agriculture. The City of San Jacinto General Plan designations within the MCP study area include light industrial, residential, commercial, public, and conservation land uses.[1] Between 2000 and 2010, the population of the city of San Jacinto increased by 86 percent, from 23,779 to 44,199. The population of San Jacinto is projected to increase by 88 percent by 2035, to over 83,000 people.

3.25.4.3 Western Riverside County MSHCP

The Western Riverside County MSHCP is described in detail in Section 3.17 (Natural Communities) but is discussed further here to provide context for the assessment of cumulative impacts. It is a regional Habitat Conservation Plan and Natural Communities Conservation Plan to enhance and maintain biological diversity and ecosystem processes while allowing for future development and economic growth. The Western Riverside County MSHCP provides a programmatic method for mitigating the direct, indirect, and cumulative adverse effects of covered activities (General Plan land use and circulation projects, including the MCP as the west-east, intra-county CETAP corridor) to 146 special-interest species and their associated habitats in western Riverside County. The Western Riverside County MSHCP plan area encompasses approximately 1,966 sq mi and includes all of unincorporated Riverside County west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. Ultimately, the MSHCP

[1] http://www.ci.san-jacinto.ca.us/city-govt/development/general-plan-11/SJ_GeneralPlan_map.pdf; site accessed October 14, 2011.

Reserve will contain approximately 500,000 acres assembled from federal and state lands, local public lands, and private sector lands. 392,270 acres have already been conserved through the Public/Quasi-Public designation in the MSHCP and the acquisition of land by the Regional Conservation Authority.[1]

The Western Riverside County MSHCP Reserve is being assembled through a combination of the following methods:

- Conservation of existing public lands
- Local acquisition of private lands
- Federal and state acquisition of private lands
- Private and public development contributions
- Regional infrastructure contributions

The Western Riverside County MSHCP's strategy for assembly of the additional 153,000 acres needed to create the envisioned 500,000 acres MSHCP Reserve takes a balanced approach. It allocates responsibility for assembling the MSHCP Reserve equitably among the County of Riverside, the 18 cities in western Riverside County, RCTC, Caltrans, and other private and public entities engaged in construction activities that impact covered species. The implementation strategy relies heavily on incentives to encourage private property owners to conserve lands through the land-use entitlement process. Where incentives are not sufficient, conservation will require the purchase of properties from willing sellers.

Over 9,200 acres of privately owned land is within Western Riverside County MSHCP Criteria Area within the MCP study area. All or portions of this criteria area may be acquired through purchase or other means for the Western Riverside County MSHCP Reserve. The analysis of cumulative effects of the MCP project considers whether the MCP project would or could induce and/or redirect growth in the study area compared to the current, adopted General Plan recommendations for the study area, with consideration given to the anticipated commitment to substantial areas of natural open space for the purpose of habitat conservation.

3.25.4.4 Cumulative Land Development Projects

Historical Trends

The cumulative adverse effects to sensitive resources resulting from land and infrastructure development in the MCP study area dates back to the late 1800s. The

[1] Source: www.wrc-rca.org; site accessed on June 4, 2012.

town of Perris was incorporated first in 1886 and then again in 1922 in its new (present day) location. The Lakeview area was settled in the 1890s and experienced a brief boom in the 1930s during the construction of the Colorado River Aqueduct. Founded in 1870 and incorporated in 1888, San Jacinto is the oldest incorporated city in Riverside County, and its growth was based on an economy of agriculture, lumber, and tourism.

Riverside County is the fifth-most populated county in California and the 15th most populated in the nation. Between 2000 and 2010, the County grew 41.7 percent, and reached a population of 2,189,641. Population in Riverside County overall is expected to increase to approximately 3.4 million by 2035, and employment is projected to increase to 1.29 million jobs by 2035.[1] The MCP study area is located in a subregion of the county known as western Riverside County. This subregion includes, but is not limited to, the cities of Corona, Perris, San Jacinto, Riverside, Moreno Valley, and Hemet, as well as unincorporated areas. According to the Western Riverside Council of Governments 2006 indicators, the subregion's population increased by 308,142 between 2000 and 2006, reaching a total of 1,497,339. The population in western Riverside County is expected to increase by over 1.3 million between 2010 and 2025, an increase of more than 60 percent. Most of the population growth is expected to stem from domestic migration and high birth rates. Population overall in Riverside County is projected to grow at an annual rate of 3.4 percent, which is much faster than the Southern California regional average rate of 1.25 percent. Furthermore, according to Southern California Association of Governments (SCAG) projections, by 2035, the County is expected to reach a total population of 3,418,623. Growth in employment is expected to occur at a higher rate, at approximately 80 percent between 2010 and 2035. Growth trends in the MCP study area were previously discussed in Section 3.2, Growth.

Specific Planned Projects

As of November 2011, there were hundreds of active land development and public infrastructure projects in the MCP study area under the jurisdiction of either the County of Riverside or the Cities of Perris and San Jacinto. The active development includes projects for which an application has been submitted and is still under

[1] 2010 Riverside County Progress Report – Riverside County Jurisdiction Profile. Riverside County Center for Demographic Research. Website: http://www.rctlma.org/portals/o/rcd/content/progress_reports/pr_2010/3_riverside_county.pdf (accessed October 3, 2014).

consideration and projects which have been approved and are pending construction. Most of the projects within the MCP study area are residential or industrial developments. Proposed and recently constructed commercial development is concentrated in areas where the MCP corridor intersects with I-215 and State Route 79 (SR-79). Proposed and approved industrial development projects are located in the city of Perris. These projects are shown in Figure 3.25.1, Cumulative Projects, and were listed previously in Table 3.1-C in Section 3.1. Although the status of some of the projects shown as "Approved" in Figure 3.25.1 has changed since November 2011 (i.e., some have been withdrawn or are being modified by the developers), the underlying General Plan land use calls for conversion of the existing land uses (agricultural) to residential or commercial land uses. Therefore, it is still appropriate to consider conversion of these properties as part of this cumulative impacts analysis. Major projects that may contribute to adverse cumulative impacts are discussed below.

March Air Force Base Redevelopment

One major cumulative project located just north and outside of the MCP study area along I-215 is the redevelopment of the former March Air Force Base, which encompasses approximately 6,500 acres straddling I-215. March Air Force Base was first established as a military installation in 1918 and has operated as a military facility almost continually since then. In July 1993, March Air Force Base was selected to be realigned and was subsequently converted from an active duty base to an Air Reserve Base, effective April 1, 1996. The decision to realign March Air Force Base resulted in approximately 4,400 acres of property and facilities being declared surplus and available for disposal actions, as well as joint use of the airfield.

Prior to the base realignment, the base employed over 10,000 military and civilian employees and contributed an estimated $500 million annually to the regional economy. With the announcement of the realignment, the regional economic loss with the change in the military mission at March Air Force Base was immediately recognized. While the base realignment and the associated loss to the region came at an inopportune time, were and are opportunities relative to the planning and implementation of new uses and providing for unmet needs of the region. The March Joint Powers Authority is planning and implementing new uses for currently vacant lands, reuse of existing facilities, and joint use of the airfield facilities for the development of an air cargo facility. Long-term economic gains in the form of

developing a civilian air cargo center, and the growth and development of an employment center which would provide 38,000 jobs, are projected.[1]

The Villages of Lakeview Specific Plan

Another major project in the MCP study area is The Villages of Lakeview Specific Plan, a proposed master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential uses, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Total development included in The Villages of Lakeview Specific Plan includes approximately 11,350 residential units, 500,000 square feet (sf) of commercial uses, and about 1,000 acres of open space. Existing infrastructure such as water, sewer, storm drains, and roadways will also be expanded as part of The Villages of Lakeview. The EIR for The Villages of Lakeview Specific Plan was certified by Riverside County in March 2010. Construction is anticipated to be phased over 20 years.[2] On May 23, 2012, the approval of the Final EIR for The Villages of Lakeview Specific Plan was set aside by Riverside County Superior Court Judge Sharon Waters, who found the EIR did not adequately address regional traffic, air quality, greenhouse gas emissions, and habitat impacts. The project applicant is currently preparing a revised Specific Plan and environmental documentation for this proposed project.

3.25.4.5 Cumulative Public Infrastructure Projects

San Jacinto Levee Project

A draft environmental document for the San Jacinto Levee Project was made available in December 2014.[3] The purpose of the levee is to protect the Ramona Expressway and Sanderson Avenue from flooding, provide access to the City of San Jacinto from the north and the west during flood events, and enable the City to implement the San Jacinto Gateway Specific Plan Project and major drainage facilities.

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1 Website: http://www.marchjpa.com/about.shtml (accessed November 17, 2011).

2 The Villages of Lakeview Final Environmental Impact Report No. 471, March 2010.

3 City of San Jacinto, Draft Environmental Impact Report, San Jacinto River Levee, Stage 4 and River Expansion Project (December 2014).

Transportation Projects

Major transportation projects in the MCP study area were previously discussed in Chapter 1 of this EIR/EIS and were shown in Figure 1.3.4. These related improvements are on facilities that represent future connections or are complementary to the MCP project, and are considered in the assessment of cumulative effects.

Most of the major transportation projects in the MCP study area consist of freeway widening or interchange improvement projects (e.g., I-215 widening), which are expected to have limited impacts because they are modifications to existing highways. Some of the projects (such as the SR-79 realignment) have a greater potential to impact resources of concern, specifically aquatic, biological, and cultural resources. All the major transportation projects are covered activities under the MSHCP. These projects are also included in the Riverside County General Plan Circulation Element; therefore, their impacts were considered in the Riverside County General Plan EIR (2003).

SR-79 Realignment Project

The SR-79 Realignment Project is proposed by the RCTC, in cooperation with Caltrans, the County of Riverside, the City of Hemet, and the City of San Jacinto. The SR-79 Realignment Project will realign SR-79 from just south of Domenigoni Parkway to Gilman Springs Road in the cities of Hemet and San Jacinto and a portion of unincorporated Riverside County, a distance of 19 miles (mi). A Draft EIR/EIS for the SR-79 Realignment Project was circulated for public review in early 2013. Additional studies were conducted on the project refinements to evaluate and assess environmental impacts, including traffic, air quality, land use, noise, and Section 4(f). The results of these additional studies will be included in a Recirculated Draft EIR/ Supplemental EIS anticipated to be circulated for public and agency review in summer 2015. This project will be constructed before the MCP project, consistent with how it was analyzed in the SCAG 2012 RTP/SCS traffic model.[1] As a result, the potential effects of the SR-79/MCP Interchange have been considered in the impacts of the SR-79 project and, therefore, are not also considered in the impacts of the MCP project.

[1] Website: http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_ModelList.pdf.

3.25.4.6 Summary of Cumulative Impact Considerations

The MCP study area is approximately 29,700 acres in size. The potential for the MCP project to result in or contribute to cumulative adverse environmental effects is defined in part by the recent adoption of applicable General Plans for the County and the Cities in the study area, the existing development and future development patterns, and existing and planned open space preservation in accordance with the MSHCP.

As described above, the adopted General Plans include provisions for additional open space preservation, as well as additional development. Approximately 22 percent of the MCP study area is already developed (see previous Figure 3.1.1, Existing Land Use). In addition to existing land uses, there are hundreds of active or recently approved development projects in the MCP study area that represent a commitment of land for thousands of additional residential units plus commercial and industrial uses.

3.25.5 Environmental Consequences

The cumulative effects or contributions to adverse cumulative effects that could result from the MCP project are discussed below. A key resource document for this analysis was the EIR for the Riverside County General Plan update approved in 2008 (General Plan EIR). The General Plan EIR provides a comprehensive assessment of environmental impacts that would result from the build out of General Plan land uses and infrastructure.

3.25.5.1 Growth-Related Effects

The cumulative resource study area for growth-related effects is western Riverside County. As described above, historically, growth in western Riverside County has been characterized by the conversion of raw land to agricultural uses followed by a subsequent conversion to urban and suburban development associated with the defense industry and post-World War II urbanization. Between 1990 and 2000, the number of residents in Riverside County grew by over 32 percent, making Riverside County the fastest growing county in California. Even with the economic slow down that began in 2008, the population in western Riverside County is expected to increase over 40 percent (700,000 people), and growth in employment is expected to rise 54 percent between 2010 and 2035.[1] Growth-related effects of the MCP Build Alternatives are discussed in Section 3.2 of this EIR/EIS. Implementation of any of the MCP Build Alternatives would involve construction of a new 16 mi freeway that

[1] Source: wrcog.cos.ca.us; site accessed on June 4, 2012.

includes proposed service interchanges to connect to local roadways in the study area, as well as providing regional connectivity of the MCP project to I-215 and SR-79. The MCP project would make the MCP study area more regionally accessible and would accommodate future growth and development in a manner consistent with that proposed in the adopted land use plans for the area.

The current and reasonably foreseeable future actions or projects that may affect growth-related effects are the projects identified previously in Section 3.25.4, as well as continued land and infrastructure development in accordance with adopted General Plans and open space preservation in accordance with the adopted MSHCP.

The land use designations in the Riverside County General Plan accommodate the projected growth and also support a more favorable jobs-to-housing ratio compared to current conditions, in which many residents of Riverside County are traveling to surrounding counties to work. The approved General Plan provides for an increase in employment opportunities closer to where people are and will be living; therefore, the General Plan EIR found that the General Plan would have a beneficial impact on the jobs/housing balance for Riverside County and the SCAG region. However, the General Plan EIR also found that development at the scale and intensity permitted under the General Plan would result in cumulative population increases in the county and the region.

Build Alternatives

The effects of the implementation of the adopted General Plans and the development projects described earlier, when combined with any of the proposed MCP Build Alternatives, include increased mobility to support job growth, an improved jobs/housing balance, and projected population increases.

Two of the major cumulative projects within the MCP study area are The Villages of Lakeview and the SR-79 Realignment Project. According to the Final EIR for the originally proposed The Villages of Lakeview Specific Plan, the project will foster population and economic growth directly through the development of 11,350 dwelling units, which would yield a population of approximately 34,163 people to the project site. The project also includes 500,000 sf of commercial development, which has the potential to create approximately 1,000 jobs. The number of new dwelling units available will directly add substantial population growth to the area, while the commercial component would add employment growth. Based on preliminary

studies, the SR-79 Realignment Project will not be a primary contributor to growth effects, because that project realigns an existing state highway.

As discussed in Section 3.2, a portion of the MCP project in the general Lakeview/ Nuevo area follows the original CETAP corridor; therefore, some amount of growth had already been planned to occur. However, as shown on the Riverside County General Plan, lands located north of Ramona Expressway are designated as agricultural, rural, and conservation uses, and because they are in private ownership, these lands are expected to experience additional growth pressures through the provision of a major transportation facility such as the MCP project. Based on the above review of land development trends within the MCP study area, implementation of the MCP project is expected to have some influence on the location, amount, rate, or type of growth in the area. Specifically, by reducing travel times within the MCP study area, the MCP project as planned, will be connected with other highways through system interchanges, will make the study area more regionally accessible, and will facilitate future growth and development in a manner consistent with that proposed in the adopted land use plans for the area.

All future development projects would be subject to their own environmental review processes, and would be required to develop mitigation measures to offset impacts to resources of concern. As discussed earlier in Section 3.2, Growth, in this Final EIR/ EIS, as a CETAP corridor, the MCP project is an integral component of the RCIP and Riverside County General Plan, and the future growth as projected and planned for in the General Plan reflects the presence of a new major west-east corridor in western Riverside County. However, some segments of the MCP project are located in areas that were not previously analyzed in the RCIP process and, therefore, these areas may be subject to indirect growth-related effects to resources of concern. The impacts of these growth-related effects are minimized through the compliance of local agencies with land use approval authority (County of Riverside, City of Perris, and City of San Jacinto) and with the policies contained in their respective General Plans (see Section 3.2.4 for a specific list of these applicable policies).

No Build Alternatives

No Build Alternatives 1A and 1B would both involve construction and improvement of the street network without an MCP facility. These alternatives would not make the MCP study area more regionally accessible, and would not provide transportation system capacity that has been assured in the Riverside County General Plan. Even without the MCP project, population increases are still likely to occur as a result of

regional population growth trends and in accordance with the approved land use designations in the adopted county and city General Plans. If the MCP project is not approved and a No Build Alternative is selected, the reduction in transportation system capacity would need to be considered by the County of Riverside, the City of Perris, and the City of San Jacinto in future land use decisions.

3.25.5.2 Farmlands

As discussed in Section 3.3 of this EIR/EIS, all the MCP Build Alternatives will impact farmlands by permanently removing over 1,000 acres of existing farmlands.

The cumulative resource study area for farmlands is Riverside County. The Riverside County General Plan EIR found that approximately 339,000 acres of land in the County were devoted to agricultural uses, including 267,000 acres in unincorporated areas and 72,000 acres within cities. Of the 267,000 acres of land in the unincorporated county that are actively utilized for agricultural production, 212,000 acres are designated as "Prime," "of Statewide Importance," or "Unique" farmland.

Historically, farmland in Riverside County has been under pressure for conversion to suburban and urban uses, particularly since World War II. Currently, the health of agricultural resources in Riverside County is characterized by continued pressure from urbanization, foreign competition, and rising production costs. Direct impacts of urbanization to agricultural use are the conversion of farmland to nonagricultural use as the result of land development. Indirect effects include increased air pollution, livestock predation by pets, crop diseases from inadequate care of off-farm ornamental plants, restrictions on pesticide use and burning, and requirements to set aside on-farm buffer zones. Production cost increases result from rising land values, water scarcity, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability resulting from trespassing on farms.

Agriculture is identified as the largest industry in Riverside County in terms of dollar value. The total gross valuation of agricultural crops in the county in 2010 was $857,720,200. This amount represents an increase of $56.6 million (7.1 percent) over the 2009 gross value.[1] The economic value of agricultural uses is increasing at the same time that the resource is experiencing pressure from several sources, including development and urbanization pressures.

[1] Riverside County Agricultural Commissioner's Office. 2010 Riverside County Agricultural Production Report.

Farmland conversion is occurring at a rapid rate in Riverside County. Based on the *Farmland Conversion Report* 2006-2008, published by the California Department of Conservation, between the years 2006 and 2008, 26,021 acres of agricultural land in Riverside County were converted to nonagricultural uses.

Build Alternatives

The MCP Build Alternatives would result in impacts that include the conversion of existing farmland to roadway as a result of right of way acquisition. The MCP Build Alternatives will result in the acquisition of between 1,032 acres and 1,109 acres of existing farmland, depending on the MCP alternative and the design variation.

The current and reasonably foreseeable future actions or projects that may affect farmlands are the projects identified in Section 3.25.4. Most conversions of farmlands would be due to land development projects. The largest of these, the proposed Specific Plan for The Villages of Lakeview, would convert approximately 495 acres of Designated Farmland (289 acres of Prime Farmland, 205 acres of Farmland of Statewide Importance, 1 acre of Unique Farmland) to non-agricultural land uses.

While the related transportation projects would also result in the conversion of farmlands, most of the projects involve widening existing facilities (e.g., Ramona Expressway) where such impacts would be limited to minor edge effects to existing farmlands. The SR-79 Realignment Project would result in impacts up to approximately 766 acres of existing farmland, 201 acres of Prime Farmland, 15 acres of Unique Farmland, and 44 acres of Farmland of Statewide Importance.[1]

As discussed in Section 3.3, Farmlands, of this Final EIR/EIS, the MCP Build Alternatives have been aligned to minimize impacts to agricultural lands (e.g., routing the alignments along the edges of agricultural parcels rather than dividing them). The routing of the MCP Build Alternatives has helped to reduce, but not fully avoid, impacts to agricultural lands; therefore, the MCP Build Alternatives contribute to a cumulative adverse effect of loss of farmlands. The impact to designated farmlands and existing agricultural uses as a result of the MCP project is consistent with the conversion of farmlands contemplated by the County and City General Plans because the MCP project is one of the designated CETAP corridors included in the General Plans. The Final EIR for the Riverside County General Plan (2003) concluded "that

[1] State of California Department of Transportation. State Route 79 Realignment Project: Domenigoni Parkway to Gilman Springs Road Draft Environmental Impact Report/Environmental Impact Statement. February 2013.

there is no reasonable or feasible mitigation to reduce impacts of the significant impacts resulting from the loss of agricultural land to a less than significant level. While the implementation of General Plan policies would encourage the conservation of agricultural land, the conversion of state-designated farmland and/or actively utilized agricultural land to non-agricultural uses remains a significant and unavoidable impact."

No Build Alternatives

No Build Alternatives 1A and 1B would both involve construction and improvement of the rest of the highway network in the study area without the MCP project. These alternatives could result in edge impacts to existing agricultural uses, particularly in cases where additional right-of-way acquisition is required to implement the transportation improvements included in these No Build Alternatives. Indirect effects could also result from impacts to access or other operational constraints and increased noise, air quality, or other effects of road construction and widening. Acquisition of additional right of way for these projects would also result in the direct conversion of designated farmlands to transportation uses.

3.25.5.3 Community Impacts/Relocations

The cumulative study area for community impacts/relocations is the same as the MCP project study area. The cumulative study area consists of undeveloped, developed, and developing areas. The health of this resource changes as land and infrastructure development results in property acquisitions and relocations. In the cumulative study area, housing for relocations is available because abundant housing stock was developed during the most recent decade, and additional residential developments are currently planned (as shown in Figure 3.25.1).

Relocations occur when development, redevelopment, and/or infrastructure projects are located in areas where residential and commercial developments currently exist. Development of vacant land does not displace residential units, people, or businesses. The Riverside County General Plan EIR found that, without the exact location of new development, it was not possible to determine whether build out of Riverside County would result in displacement of residential units or people. As shown in Figure 3.25.1, most of the planned development is located in currently vacant areas. However, widening of roadways adjacent to existing development may result in the displacement and relocation of some businesses and residents.

Build Alternatives

The MCP Build Alternatives would result in the acquisition of nonresidential (dairies, agriculture, manufacturing, industrial, and retail), residential (mobile homes, single-family, and multifamily), and public (school) properties.

Combined with the MCP project, anticipated cumulative impacts resulting from the cumulative projects in the MCP study area include the acquisition of residential and nonresidential properties and the displacement of occupants. Most displacement of residential and nonresidential properties would be anticipated to occur along existing or planned roadways as the planned street network is developed. Properties along I-215 in the MCP study area may be affected by right of way acquisition required for the MCP project, as well as by future improvement projects to I-215. According to the original Final EIR for The Villages of Lakeview Specific Plan, development of that project would not displace substantial numbers of existing housing that would require the construction of replacement housing because the project is primarily located on land without existing housing. According to the Draft EIR/EIS for the SR-79 Realignment Project, the build alternatives for that project would potentially displace between 29 and 42 residential units, 75 to 134 residents, 13 to 14 commercial units, and 86 to 90 employees.[1]

All relocations required for the MCP project would be handled in accordance with applicable federal and State laws requiring that prior to any property acquisition or relocations, relocation analysis must be prepared, and adequate and appropriate compensation provided. The Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (Public Law 91-646, 84 Stat. 1894) mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced by development. The Uniform Relocation Assistance and Real Property Acquisitions Policies Act requires that comparable, decent, safe, and sanitary replacement housing that is within a person's financial means be made available before that person may be displaced. Considering the abundant housing stock developed during the most recent decade and the amount of planned residential developments (as shown in Figure 3.25.1), a sufficient number of comparable replacement dwellings meeting decent, safe, and sanitary standards

[1] State of California Department of Transportation. State Route 79 Realignment Project: Domenigoni Parkway to Gilman Springs Road Draft Environmental Impact Report/Environmental Impact Statement. February 2013.

exist within the cumulative study area to provide adequate relocation opportunities for displaced residents affected by all cumulative projects.

It is anticipated that finding replacement housing for owner or tenant-occupied residences would not present any unusual problems. The economic downturn and foreclosures in the area starting in 2008 have increased the number of properties available for both non-residential and residential relocations. The exceptions are those displaced from mobile homes (the MCP Build Alternatives will impact up to 55 mobile homes). The current inventory for mobile home unit sales and rentals in this part of Riverside County is very limited. The area lacks in-kind mobile home replacement housing suitable as decent, safe, and sanitary. One option is for mobile home displacees to relocate into slightly larger single-family residences, resulting in a housing-of-last-resort entitlement. A review of the cumulative projects in Figure 3.25.1 did not identify other projects that would displace mobile homes. RCTC's compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 would offset any impacts to communities due to relocations. Therefore, additional mitigation for cumulative effects is not warranted.

No Build Alternatives

The No Build Alternatives include the construction of planned roadway improvements without the MCP project. Implementation of these alternatives would affect properties immediately adjacent to the roads, particularly where new right of way acquisition is required for roadway widening. That right-of-way acquisition may displace both residential and non-residential properties along alignments of the roadways.

3.25.5.4 Visual/Aesthetics

The cumulative resource study area for visual and aesthetics is the MCP project study area, including portions of the cities of Perris and San Jacinto, as well as the unincorporated area between the cities (see Figure 2.1.1, Project Vicinity and Study Area). Historically, visual resources in the cumulative study area have been characterized by the conversion of raw land to agriculture uses, followed by the conversion to residential and commercial development associated with the defense industry and post-World War II urbanization. Currently, the health of visual and aesthetic resources in the study area is determined to a large extent by the effectiveness of local municipalities and the County of Riverside in implementing adopted General Plans that identify areas appropriate for new and more intensive development to accommodate project growth, as well as identifying areas that are to

remain as natural, recreation, or open space. The current and reasonably foreseeable future actions or projects that may affect visual and aesthetics of the study area are the projects identified on Figure 3.25.1, as well as continued development and open space preservation in accordance with adopted General Plans and the adopted Western Riverside County MSHCP.

The Riverside County General Plan includes policies to improve the visual character of the built environment, including the concentration of growth and preservation of rural and open space character in certain areas of the county; providing for the permanent preservation of important natural and scenic resources; incorporating open space within developed areas; ensuring the compatibility of existing and new development; maintaining or enhancing the character of the individual project site and the immediate area; conserving view corridors, skylines and scenic vistas; and imposing restrictions on development activities that may adversely affect the existing visual characteristics of areas within the county. Mitigation in the Riverside County General Plan EIR includes design review of development projects. Even with these policies in place, future development of unincorporated areas of the county may alter the characteristics of locally or regionally important visual resources. The General Plan EIR found that the conversion of vacant land to urban uses was a significant and unavoidable project and cumulative effect (under CEQA) of the General Plan land uses on visual resources by causing the obstruction of existing open views and/or obstructing distant panoramic views from existing development.

Riverside County Ordinance Number 655 restricts the permitted use of certain light fixtures that emit undesirable light rays into the night sky and that have a detrimental effect on astronomical observation and research at the Mount Palomar Observatory. This ordinance and mitigation specified in the General Plan EIR were found to reduce the impact of light and glare from development allowed by the General Plan to a level that is less than significant under CEQA.

The effects of the cumulative development and transportation projects described above include contributing to a change from a county characterized by large undeveloped areas, including open space and agricultural landscapes, to a more developed, urbanized landscape.

Build Alternatives

All the MCP Build Alternatives would contribute to a cumulative adverse effect with regard to visual impacts and change of visual character within the MCP study area.

As one of the fastest growing areas in the United States, western Riverside County in general and the MCP study area in particular are changing from vacant land and agricultural landscapes to a more urbanized visual character. Tracts of vacant land within the MCP study area are either approved or planned for future development. The provision of transportation infrastructure such as the MCP project typically accompanies the development of land for residential, industrial, and commercial purposes. Although the MCP project would contribute to a cumulative visual impact within the MCP study area, this new transportation facility was expected and planned for in the Riverside County General Plan.

The visual impacts of the MCP project include the introduction a major transportation facility and large bridge structures within existing open space, rural, and agricultural areas. The MCP project would also alter the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls. As a result, the MCP project would contribute to the cumulative change in visual character of the MCP study area from rural to urban by introducing a major transportation facility and its associated traffic, which did not exist there before.

In addition, light and glare would increase as a result of the MCP in those areas that are currently rural in character. All the MCP Build Alternatives would increase light and glare in the rural/agricultural areas between the McCanna Hills and SR-79. Lighting for the MCP project would adhere to County of Riverside Ordinance No. 655, Regulating Light Pollution for Zone B. Lighting fixtures would be designed to minimize glare on adjacent properties and into the night sky. In addition, lighting would be shielded with nonglare hoods and focused within the MCP project right of way. However, lights from vehicles on the MCP facility at night would still contribute to a loss of darkness in the night sky in the study area.

Combined with the proposed MCP project, anticipated cumulative impacts to the visual environment include the conversion of open space, rural, and agricultural areas to urbanized residential developments and an increase in light and glare. Two major cumulative projects, the proposed The Villages of Lakeview Specific Plan and the SR-79 Realignment Project, would contribute to the conversion of open space and agricultural landscapes to a more urbanized visual character and increase light and glare.

Project mitigation is identified in Section 3.7, Visual/Aesthetics, and includes the development and implementation of a landscape plan for MCP; saving existing

mature trees; incorporating attractive walls, medians, and other visually pleasing hardscape features into the final design of the MCP project; and aesthetic enhancements for sound walls in the final design. Because cumulative projects would be conditioned to comply with the applicable City and County design requirements, open space policies, and land use policies, additional mitigation for cumulative impacts to visual and aesthetic resources is not warranted.

No Build Alternatives

Under Alternative 1A, the planned street network would be constructed except for improvements to the Ramona Expressway. Because the Ramona Expressway would remain as it is today, Alternative 1A would not change the existing visual setting and would not create visual impacts to the MCP study area.

Under Alternative 1B, the MCP project would not be constructed, but the Ramona Expressway would be constructed to its ultimate width and alignment as shown in the Riverside County General Plan. The widening of the Ramona Expressway between I-215 and to SR-79 would include conversion of some agricultural land to transportation uses but would not include the construction of any interchange structures in this area. The widening of Ramona Expressway would contribute to cumulative adverse visual and aesthetic impacts in the study area, but not to the same intensity as the MCP project.

3.25.5.5 Cultural Resources

The assessment of cumulative effects to cultural resources, which are defined as archaeological sites and historic-period structures/features, considers the direct and indirect impacts of the MCP project on qualifying resources and whether they contribute to cultural resources impacts within a broader cumulative impact study area. Because the MCP project generally follows the route of the Ramona Expressway, which bisects the Perris and San Jacinto Valleys, the Resource Study Area (RSA) includes the larger and geographically defined areas of the Perris and San Jacinto Valleys. Historically, the Perris and San Jacinto Valleys have seen a general pattern of transformation from open land, to historical farmsteads, to commercial agricultural pursuits, and most recently, to modern residential and commercial centers.

According to the Riverside County General Plan EIR, the cultural resource characteristics of Riverside County reflect human settlement, exploitation, arts, crafts, technology, ideology, and past environmental conditions. Land use by prehistoric

native inhabitants in the RSA occurred for thousands of years, and specific use of cultural areas by local Native Americans continues today. The area was settled by Euro-Americans in the late 1800s.

The RSA contains numerous cultural resources that are under constant pressure from modern land uses such as agriculture, livestock and dairy farming, and urban and suburban development. These land uses can and do destroy cultural resources. As discussed in Section 3.2, Growth, of this EIR/EIS, the MCP project will have an impact on growth within the RSA by making it more accessible, which will in turn impact cultural resources. The general health of cultural resources in the RSA can be considered to be in decline because there are a finite number of cultural resources, and once destroyed, they cannot be replaced.

This analysis considers impacts only to cultural resources that are listed on or eligible for listing on either the National Register, known as "historic properties," or the California Register, known as "historical resources." No further management of non-qualifying resources is required under existing laws and regulations, and destruction of those resources is not considered to be a significant impact or effect. The analysis of the MCP project's contribution to past, present, and future impacts is, therefore, based on impacts to known archaeological sites, historic properties, and historical resources.

Build Alternatives

The effects of an undertaking on cultural resources are measured as "direct" and "indirect." Direct effects are those that are caused by a project and occur in conjunction with construction of the project. Indirect effects include impacts related to noise, vibration, or setting (all typically related to the built environment) and possible looting and vandalism of archaeological resources that would be more accessible to the general public due to the presence of the MCP. In addition, archaeological resources are subject to damage and destruction by natural erosion, and erosion exacerbated by excavation for the MCP project and other cumulative projects. The current and reasonably foreseeable future actions or projects that may affect historic properties and/or historical resources are the projects identified on Figure 3.25.1, as well as continued development in areas of known and currently unknown cultural resources.

The mitigation for the impacts of the MCP on Site 33-16598 is addressed in a Memorandum of Agreement (MOA) between FHWA and SHPO. The MOA is

provided in Appendix U, Memorandum of Agreement between the Federal Highway Administration and the California State Historic Preservation Officer Regarding the Mid County Parkway Project, in this Final EIR/EIS.

The MCP *Historic Property Survey Report* (HPSR) (June 2012), reports a total of seven resources that were evaluated for significance within the MCP Area of Potential Effects (APE). There is also one additional site within the APE, but adjacent to the MCP right of way (area of direct impacts), that was not evaluated (Site 33-3653) and is assumed to be eligible for the National Register for the current undertaking under Criteria A and D and will be protected from adverse effects by establishing an Environmentally Sensitive Area. The State Historic Preservation Officer specifically did not object to these findings in a letter dated September 18, 2012.

Of the seven resources evaluated, one is an architectural resource and six are archaeological resources. The architectural resource within the APE is the CBJ Dairy (Site 33-15752), which dates to 1959. This resource was previously evaluated as ineligible for the National Register and the State Historic Preservation Officer concurred in 2010, and reaffirmed this in a letter dated September 18, 2012. However, the CBJ Dairy is considered a historical resource for the purposes of CEQA; refer to Chapter 4 for additional discussion of this resource.

The six archaeological resources include four milling stations without artifacts (Sites 33-19862, 33-19863, 33-19864, and 33-19866), one prehistoric multi-use site (Site 33-16598), and one historical archaeological resource (Site 33-19865).

Sites 33 19862, 33-19863, 33-19864, and 33-19866 were initially evaluated as ineligible for the National Register. In the September 18, 2012, letter, the State Historic Preservation Officer agreed that these cultural resources have limited data potential and archaeological values beyond the data already recorded, but noted that based on comments from the Tribes, these resources individually may not be eligible but may contribute to an as yet to be defined historic district located within the cultural landscape identified by the Tribes. Therefore, the State Historic Preservation Officer went on to state in the September 18, 2012, letter that existing data and the information provided by the Tribes should be analyzed to determine if a National Register eligible District may exist and if the four Sites contribute to the District's significance. The State Historic Preservation Officer also suggested as an option that these four Sites be assumed eligible for the National Register for this undertaking and

to explore means for taking the effects of the undertaking into account. For the MCP project, these four Sites are assumed eligible.

Site 33-16598 was determined to be a historic property pursuant to Section 106 and to qualify as a historical resource pursuant to CEQA. Site 33-16598 is eligible for the National Register under Criteria A, C, and D. In the September 18, 2012, letter, the State Historic Preservation Officer concurred with this eligibility determination.

Site 33-19865 was determined not eligible for listing in the National Register and is, therefore, not a historic property as defined by Section 106; nor does it qualify as a historical resource pursuant to CEQA. In the September 18, 2012, letter, the State Historic Preservation Officer concurred with this eligibility determination. Because Site 33-19865 is not a historic property, it is not discussed further in this evaluation of cumulative effects.

It is expected that the MCP project would affect the above resources (Sites 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866, and the CBJ Dairy) in a manner that would contribute to significant cumulative effects. A discussion of cumulative effects for these resources follows.

Sites 33-19862, 33-19863, 33-19864, and 33-19866. These four bedrock milling sites that are within the MCP right of way (area of direct impacts) will be directly impacted and entirely destroyed by the MCP project. There will be cumulative adverse impacts by the MCP project to these sites and to prehistoric archaeological sites of this type within the MCP RSA.

Site 33-16598. This is a multi-use prehistoric site that is entirely within the APE, but only a portion of the site is within the proposed MCP right of way (area of direct impacts), and this portion measures approximately 2.6 ac. The site is on land that has been deep-ripped and plowed for agriculture for many years. Many surface artifacts, especially in the central and northern portions of the site, may be displaced from their original provenience by repeated agricultural plowing activities across the site in combination with extensive trenching activities that displaced soil and artifacts during work for the Inland Feeder Project (Susan Goldberg, Applied Earthworks personal communication, 2007).

The portion of this resource that is in the right of way (area of direct impacts) for the MCP project will be directly impacted by all MCP Build Alternatives. The remainder of the site will be protected by designation as an Environmentally Sensitive Area and

will be fenced off and avoided during construction. Although the MCP project and the cumulative projects will occur in compliance with the applicable federal and state regulations identified in Section 3.8.1, there would still be a cumulative adverse effect to Site 33-16598 by the MCP project.

Three other projects have contributed or have the potential to contribute to cumulative impacts for Site 33-16598: the Colorado River Aqueduct project, the Inland Feeder project, and proposed The Villages of Lakeview Specific Plan. Construction of the Colorado River Aqueduct and the Inland Feeder have previously destroyed approximately 12.5 ac (16 percent) of the site. Based on the original Final EIR for The Villages of Lakeview Specific Plan, a total of 47 ac of Site 33-16598 would be within designated open space areas of The Villages of Lakeview project, and will be preserved. The remaining 19 ac of Site 33-16598 would be subject to direct impacts from grading for The Villages of Lakeview.

The MCP project will directly impact the northernmost 2.6 ac of the 19 ac that would also be subject to direct impacts by The Villages of Lakeview Specific Plan. While the MCP project will cause an adverse effect to the site, that effect is located in a portion of the site that will also be impacted by the land development. Cumulatively, there is an adverse impact to the site from both projects, but the contribution to that impact by the MCP project is substantially less.

In summary, there is a cumulative adverse impact to Site 33-16598. When considered together, the proposed Specific Plan for The Villages of Lakeview and the MCP project could directly impact 19 ac (24 percent) of Site 33-16598. The archaeological testing program for the MCP project demonstrated that the 2.6 ac (3.3 percent of the site) that will be directly impacted by the MCP project do not possess locational integrity and do not contribute to the site's eligibility. The mitigation for the cumulative impacts to Site 33-16598 by the MCP project are addressed in the Memorandum of Agreement provided in Appendix U, Memorandum of Agreement Between the Federal Highway Administration and the California State Historic Preservation Officer Regarding the Mid County Parkway Project.

The CBJ Dairy (Site 33-15752). The San Jacinto North Design Variation (SJN DV), which is common to all MCP Build Alternatives, would have a direct impact to this historical resource. However, this design variation is not part of the preferred alternative for the MCP project; therefore, the MCP project will not contribute to cumulative adverse effects to the CBJ Dairy.

No Build Alternatives

Because no improvements to the Ramona Expressway would be made under Alternative 1A, this Alternative would not impact historic properties in the cumulative study area. One historic property that has been determined eligible for listing in the National Register and California Register (Site 33-16598) could be affected by Alternative 1B, which involves widening the Ramona Expressway as called for in the Riverside County General Plan Circulation Element. Because Site 33-16598 abuts Ramona Expressway, any widening of Ramona Expressway could impact this site.

Mitigation

The MCP project would result in the loss of all or portions of six resources, and would contribute to the cumulative impacts to historic properties. In summary, of the seven identified historic properties and/or historical resources within the MCP APE, there will be an adverse effect by the MCP project to one National Register and California Register eligible site (Site 33-16598); and to four sites assumed eligible for the National Register as contributors to a larger cultural landscape (Sites 33-19862, 33-19863, 33-19864, and 33-19866). One site in the MCP APE that is assumed eligible (Site 33-3653) will be protected as an Environmentally Sensitive Area; there will be no cumulative impacts to this site by the MCP project.

Based on the current analysis, and pending project-level cumulative impact analysis for future projects, mitigation would likely be required for the projects discussed because they will all result in the loss of all or portions of historic properties and/or historical resources.

Avoidance and preservation of historic properties and/or historical resources is preferred and specific measures for the identification of these resources that can be feasibly protected as Environmentally Sensitive Areas is described in Section 3.8, Cultural Resources. In instances where avoidance is not possible, mitigation measures to reduce project impacts are also presented in Chapter 3.8. They include the implementation of the Discovery and Monitoring Plan (included in the Memorandum of Agreement provided in Appendix U) for the MCP project, and the Memorandum of Agreement for Sites 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866. As stipulated in the MOA, RCTC will fund the preparation of a Cultural Landscape Study, which because of its scope focusing on broader cultural landscape, will provide mitigation for the direct and cumulative adverse effects resulting from the distribution of the four bedrock milling sites (Sites 33-19862, 33-19863,

33-19864, and 33-19866). The Memorandum of Agreement includes specific mitigation measures for these sites and stipulates the responsibilities of the FHWA, State Historic Preservation Officer, Caltrans (as assigned by FHWA), and RCTC on measures that will be taken to avoid, minimize, or mitigate the effects of the undertaking on historic properties. The Native American tribes and groups that have been involved in consultation for the MCP project participated in the development of the Memorandum of Agreement. The Memorandum of Agreement is provided in Appendix U in the Final EIR/EIS.

Inadvertent discovery of unknown cultural resources during construction could lead to the damage or destruction of these resources, and this remains a potential cumulative effect. Proposed mitigation measures regarding the discovery of unknown resources or human remains are described in Chapter 3.8.

3.25.5.6 Paleontology

The cumulative study area for this resource is the same as the MCP study area. The health of this resource is fragile because there are a limited number of paleontological resources in the cumulative study area, and they are a nonrenewable resource. Land and infrastructure development can destroy paleontological resources; therefore, the health of this resource is determined to a large extent by the effectiveness of local municipalities and the County of Riverside in implementing adopted General Plans that identify areas of high paleontological sensitivity and include goals, policies, and actions to preserve these resources. The current and reasonably foreseeable future actions or projects that may affect this resource are the projects identified on Figure 3.25.1, as well as continued development in areas of high paleontological sensitivity. In addition, paleontological resources are subject to damage and destruction by natural erosion and erosion exacerbated by excavation and grading. Resources may also be damaged and removed from meaningful stratigraphic context by vandalism and unauthorized collecting by construction crews and after-hours visitors.

Although grading activities of development projects remove paleontological resources from the ground, the finding, excavation, and preservation of fossils allows the opportunity to contribute to the body of knowledge of the history of western Riverside County, which is a beneficial cumulative impact. Development of a Paleontological Resource Impact Mitigation Program (“PRIMP” for Riverside County and the Society of Vertebrate Paleontology, and “Paleontological Mitigation Plan [PMP]” for Caltrans) for the MCP project that plans for fossil recovery and

institutional storage is in accordance with guidelines of the international Society of Vertebrate Paleontology.

Build Alternatives

There are sensitive paleontological resource localities in formations that are crossed by the MCP Build Alternatives. Because ground-disturbing activities associated with the MCP project may impact paleontological resources, a project-specific PMP will be completed prior to construction as described in Mitigation Measure PAL-1 in Section 3.11, Paleontology. Additional mitigation for cumulative effects to paleontological resources is not warranted because paleontological conditions and finds are localized and specific to each area of development.

According to the original Final EIR for proposed The Villages of Lakeview Specific Plan and the Draft EIR/EIS for the SR-79 Realignment Project, these projects are also located on soils with high sensitivity for paleontological resources. Combined with the proposed MCP project, anticipated cumulative impacts include the continued destruction and recovery of paleontological resources as a result of excavation associated with construction of other land development and infrastructure projects. The cumulative projects will also be required to comply with the applicable federal and State regulations identified in Section 3.12.1.

No Build Alternatives

Under the MCP No Build Alternatives, the permanent impacts discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but impacts to paleontological resources would occur for the other transportation improvements included in the No Build Alternatives.

3.25.5.7 Natural Communities

The cumulative study area for natural communities is western Riverside County. The health of this resource is determined to a large extent by the effectiveness of local municipalities and the County of Riverside in implementing the adopted Western Riverside County MSHCP. Historically, this resource has become more fragmented by development over time. Since its approval in 2004, implementation of the Western Riverside County MSHCP allows for development while maintaining the health of this resource by providing for conservation of species and habitats and a coordinated system of linkages to connect conservation areas.

The Western Riverside County MSHCP provides a comprehensive, habitat-based approach to the protection of covered species by focusing on conservation and

management of lands essential for their long-term conservation. This approach is consistent with United States Fish and Wildlife (USFWS) regulations concerning the designation of critical habitat in providing for the protection of "those physical and biological features essential to the conservation" of the species (MSHCP, Volume 3, Section 14.2). As a regional plan, the MSHCP serves to provide mitigation for cumulative impacts to covered species and their habitats. Project consistency with the MSHCP ensures that the cumulative impacts to those species are effectively mitigated.

The MSHCP provides guidelines that would avoid and minimize impacts to sensitive habitats known to occur in the vicinity of planned development and planned roadways while permitting continued development and the construction, operation, and maintenance of roadways. The MSHCP EIR/EIS (Riverside County Transportation and Land Management Agency, 2004) concluded that because of features incorporated into the MSHCP and the additional mitigation measures included in the EIR/EIS, impacts to sensitive vegetation communities would be reduced to less than significant levels under CEQA.

Build Alternatives

The MCP Build Alternatives would permanently impact between 10.8 and 11.4 ac of riparian riverine areas and between 117.0 and 124.6 ac of other natural communities of special concern, depending on the alternative in Section 3.17, Natural Communities and the design variation, as detailed previously in Tables 3.17.C and 3.17.D. Project construction would contribute to the incremental loss of natural communities in the region. Cumulative impacts of the MCP project to sensitive natural communities are covered by the MSHCP because the project is a covered activity under the MSHCP as the west-east intra-county CETAP corridor. The MCP project would comply with the provisions of the MSHCP. There would not be any direct effects to the reserve lands of the Habitat Conservation Plan for the Stephens' Kangaroo Rat. However, for the parts of the MCP Build Alternatives within the boundaries of Habitat Conservation Plan for the Stephens' Kangaroo Rat, the project would be in compliance with the Habitat Conservation Plan for the Stephens' Kangaroo Rat.

In addition to the compliance of the MCP project with the provisions of the MSHCP, project mitigation includes implementation of Measures NC-1 through NC-6 to avoid, minimize, and/or compensate impacts to natural communities by protecting the long-term conservation value of sensitive areas and requiring construction monitoring to

ensure compliance with all applicable provisions of the MSHCP and other biological resource mitigation measures or permit conditions.

Compliance with provisions of the MSHCP and the Habitat Conservation Plan for the Stephens' Kangaroo Rat address the direct, indirect, cumulative, and growth-related project effects on covered species and habitats in western Riverside County resulting from activities covered by the MSHCP, including the MCP project.

Two of the larger cumulative projects in the MCP study area are the proposed The Villages of Lakeview Specific Plan and the SR-79 Realignment Project. According to the original Final EIR for the proposed Villages of Lakeview Specific Plan, that project would result in direct impacts to 60.29 ac of various areas of Riversidean sage scrub, including 47.85 ac of undisturbed Riversidean sage scrub, 0.35 ac of sage scrub/cholla vegetation, and 12.09 ac of disturbed areas of Riversidean sage scrub. According to the Draft EIR/EIS for the SR-79 Realignment Project, that project would impact up to nine sensitive natural communities, depending on the alternative selected. The SR-79 Alternatives would impact up to approximately 24.7 ac of alkali grassland, 0.01 ac of alkali playa, 1.3 ac of cottonwood-willow riparian forest, .01 ac of mulefat scrub, 124 ac of Riversidian sage scrub, 8.4 ac of seasonal wetland, 2 ac of vernal pool, and 24 ac of willow riparian scrub and forest. The SR-79 Realignment Project and the proposed Villages of Lakeview Specific Plan are considered Covered Activities under the MSHCP and would comply with the provisions of the MSHCP. In addition, these projects would be in compliance with the Habitat Conservation Plan for the Stephens' Kangaroo Rat.

Combined with cumulative projects, construction of the MCP would contribute to the incremental loss of natural communities in the region; however, the MSHCP provides a comprehensive approach to the regional conservation of natural communities and, as a regional plan, serves to provide mitigation for cumulative impacts to such habitats. The cumulative projects would be consistent with the MSHCP, which would ensure that the cumulative impacts to those habitats are effectively mitigated. Therefore, additional mitigation beyond MSHCP compliance and measures NC-1 through NC-6 would not be warranted.

No Build Alternatives

Alternative 1A would result in fewer impacts to natural communities than any of the MCP proposed Build Alternatives because the MCP project would not be built and no improvements would be made to the Ramona Expressway. Alternative 1B would also

result in fewer impacts than the Build Alternatives even though it would include widening of the Ramona Expressway.

3.25.5.8 Wetlands and Other Waters

The cumulative study area for wetlands and other waters is western Riverside County, specifically the San Jacinto River watershed. Historically, the health of this resource has declined as over 80 percent of historical wetlands in California have been destroyed. Major loss of wetland habitat occurred during the mid-1950s to mid-1970s, but since then the rate of loss has decreased. Currently, the health of this resource is determined to a large extent by the effectiveness of federal restoration efforts.[1]

Approximately 60 percent of western Riverside County (752,870 ac out of the 1,258,780 ac within the MSHCP Plan Area) has been identified as reasonably foreseeable for development, based on anticipated impacts projected by the MSHCP within the next 75 years. Planned infrastructure improvements covered under the MSHCP include seven types of roadways, freeways, CETAP corridors, and other major facilities that have been identified in the Riverside County General Plan Circulation Element; flood control facilities; waste/wastewater facilities; electrical utility facilities; and natural gas facilities. Projects that may impact high-value or sensitive wetlands include the SR-79 Realignment Project, the San Jacinto River Flood Control Project, and bridge projects crossing the San Jacinto River, as well as other projects shown in Figure 3.25.1.

To mitigate for impacts resulting from these and other reasonably foreseeable projects covered under the MSHCP, approximately 500,000 ac in the MSHCP Plan Area are to be assembled as Conservation Area. Because the existing MSHCP database does not provide project-specific levels of detail for vegetation mapping, the MSHCP requires certain local implementation measures that require additional information that must be gathered during the long-term implementation of the MSHCP. These local implementation measures require identifying and mapping of riparian/riverine areas and vernal pools, as well as other habitats for species survey requirements.

Riparian/riverine areas are defined by the MSHCP as lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend on soil moisture from a nearby freshwater

[1] United States Geological Survey. http://geochange.er.usgs.gov/sw/impacts/hydrology/wetlands/; site accessed November 16, 2011.

source, or areas with freshwater flow during all or a portion of the year. Additionally, drainages vegetated by upland species may meet the definition of riparian/riverine areas if it is determined that the functions and values of the drainages has the potential to affect species downstream within the MSHCP Conservation Area. A functions and values assessment of the mapped riparian/riverine and vernal pool areas is required under the MSHCP and should consider hydrologic regimen, flood storage and flood flow, modification, nutrient retention and transformation, sediment trapping and transport, toxicant trapping, public use, wildlife habitat, and aquatic habitat. The functions and values assessment should focus on riparian/riverine areas and those functions that may affect downstream values within the MSHCP Conservation Area. Additionally, the assessment of these riparian/riverine and vernal pool areas shall include identification and mapping of these areas, as well as consideration of species composition, topography/hydrology, and soil analysis.

Where impacts occur to riparian/riverine areas or vernal pools, the MSHCP requires that measures shall be incorporated into the project design to ensure the long-term conservation of the areas to be avoided, and their associated functions and values, through the use of deed restrictions, conservation easement, or other appropriate mechanisms. A Joint Project Review (JPR) for the MCP project by the Resource Conservation Agency determined the MCP project is consistent with the Western Riverside County MSHCP. The JPR determination and the MSHCP consistency analysis are provided in Appendix T, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination, which includes the Determination of Biologically Equivalent or Superior Preservation (DBESPs) for the MCP project.

The guidelines in the Western Riverside County MSHCP include design criteria that avoid and minimize impacts to sensitive habitats known to occur in the vicinity of planned development and planned roadways, including riparian and riverine environments. Impacts to wetlands and other waters would be reduced to less than significant levels under CEQA due to the features incorporated into the MCP project that are provided pursuant to the requirements of the MSHCP and the additional mitigation measures included in the MSHCP EIR/EIS. The conclusions above are consistent with the conclusions of the MSHCP EIR/EIS.

Build Alternatives

Waters of the United States were identified and riparian ecosystems were assessed at a watershed level for the areas impacted by the MCP Build Alternatives. The findings

of this assessment are contained in the report titled *Potential Impacts of Alternative Corridor Alignments to Waters of the United States, Riparian Ecosystems, and Threatened and Endangered Species: Mid County Parkway Project, Riverside County, California* (United States Army Corps of Engineers Research and Development Center, 2011) (provided in Appendix G in the Supplemental Natural Environmental Study). The objective of this study was to analyze and compare the direct and indirect impacts of the MCP Build Alternatives on waters of the United States and riparian ecosystems. The results of the report indicate that overall, the impact of all the MCP Build Alternatives to riparian ecosystems would be minimal given the relatively large size of the permanent impact footprint associated with the project alternatives. The minimal impact reflects the strategic placement of the alignments for each MCP Build Alternative to avoid riparian ecosystems to the extent feasible.

The MCP Build Alternatives would impact between 8.66 and 9.23 ac of riparian areas under California Department of Fish and Wildlife (CDFW) jurisdiction, between 4.55 and 5.18 ac of United States Army Corps of Engineers (USACE) nonwetland waters, and between 1.97 and 2.18 ac of USACE wetlands, depending on the alternatives and the design variation. In the evaluation of impacts of each MCP Build Alternative to riparian habitat and streambeds and USACE jurisdictional wetlands and nonwetland waters of the U.S., it was determined that the Alternative 4 Modified base case and the San Jacinto River Bridge Design Variation (SJRB DV) would have the greatest impact, and Alternative 9 Modified with the SJN DV would have the fewest permanent impacts. As discussed in the HMMP for USACE Jurisdictional Waters provided in Appendix P of this EIR/EIS, there are adequate mitigation opportunities available on site to compensate for these impacts that would result in a no net loss of wetlands and wetland functions.

Two of the larger cumulative projects in the MCP study area are The Villages of Lakeview Specific Plan and the SR-79 Realignment Project. According to the original Final EIR for the proposed Villages of Lakeview Specific Plan, this project would not impact jurisdictional wetlands or alkali playa vernal pools. According to the Draft EIR/EIS for the SR-79 Realignment Project, that project would impact up to 1.99 ac of vernal pools, 1.06 ac of seasonal wetlands, 9.05 ac of seasonal wetlands, 6.35 ac of constructed pools, 1.59 ac of riparian areas, 5.09 ac of drainage ditches, and 0.31 ac of erosional drainages.

The MCP project and the cumulative projects described earlier in Section 3.25.4, Identification of Cumulative Plans and Projects, and shown on Figure 3.25.1 are in an area of Riverside County that is transitioning from rural/agricultural uses to more developed residential and commercial uses.

Specific information regarding the effects of all of the cumulative projects on waters of the United States, including wetlands, was not available at the time the cumulative impacts analysis was conducted because information from environmental studies for those projects had not yet been made available by the local agencies and/or project applicants. However, some general comparisons of the MCP project to the cumulative projects, for purposes of assessing the intensity and context of the impacts of the MCP project, can be made. The alignments of the MCP Build Alternatives would be in an area generally similar to the areas affected by the identified cumulative projects. However, less than 15 percent of the proposed MCP alignment consists of native habitat, whereas other areas adjacent to and in the number of the MCP, as shown on Figure 3.25.1, include specific plan areas in extensive areas of native habitat, which likely contain ephemeral upland drainage courses in proportions similar to the MCP project in the area south of Lake Perris.

The wetland impacts of the MCP Build Alternatives would be approximately 2 acres, whereas the wetland impacts of the SR-79 project will be over 10 acres.[1] Similarly, the crossings of the San Jacinto River by the MCP project alignments will result in substantially less impact than the San Jacinto River Flood Control Project and other likely crossings of the River associated with the cumulative projects. Overall, the total MCP project impact area of approximately 1,300 acres is approximately 7 percent of the more than 18,300 acres of other cumulative projects.

The MCP project is required to obtain a Section 404 permit from the USACE, a Section 1602 Agreement for Streambed Alteration from the CDFW, and a water quality certification or waiver from the Santa Ana Regional Water Quality Control Board (RWQCB). Wetland habitat would be mitigated at a minimum 2:1 ratio. The DBESPs for the MCP project are provided in Appendix T. Detailed mitigation requirements will incorporate measures in the HMMP for USACE Jurisdictional Waters for the MCP project provided in Appendix P of this EIR/EIS. The cumulative

[1] State of California Department of Transportation. State Route 79 Realignment Project: Domenigoni Parkway to Gilman Springs Road Draft Environmental Impact Report/Environmental Impact Statement. February 2013.

projects shown in Figure 3.25.1, including the SR-79 Realignment Project, would be subject to similar mitigation requirements as the MCP project. Because each cumulative project would be required to replace impacted wetlands and nonwetland waters, additional mitigation for cumulative effects of the MCP project is not warranted.

No Build Alternatives

Under Alternative 1A, because the Ramona Expressway would remain as it exists today, there would be no permanent impacts to wetlands or other waters along this roadway under this Alternative. Therefore, permanent impacts to wetlands and other waters in the vicinity of Ramona Expressway would be less for Alternative 1A than impacts that would occur as a result of the MCP Build Alternatives.

Under Alternative 1B, permanent impacts to wetlands and other waters would be expected to be less than the MCP Build Alternatives because Ramona Expressway would be widened (and would have a smaller footprint than the MCP) and the MCP project would not be built.

3.25.5.9 Plant Species

The cumulative study area for plant species is western Riverside County. Historically, the health of this resource has become more degraded by development over time. Since its approval in 2004, implementation of the Western Riverside County MSHCP allows for development of covered activities while maintaining the health of this resource by providing for conservation of species and habitats. The MSHCP provides a comprehensive approach to the regional conservation of plant habitats and covered species; as a regional plan, it serves to provide mitigation for cumulative impacts to habitats and covered species. The sensitive species in the MCP study area that are not covered also benefit from the conservation measures of the MSHCP because they occupy some of the same habitats.

The MSHCP provides guidelines that would avoid and minimize impacts to sensitive plant habitats known to occur in the vicinity of planned development and planned roadways while permitting continued development and the construction, operation, and maintenance of roadways. The MSHCP EIR/EIS concluded that, because of features incorporated into the MSHCP, impacts to listed and nonlisted plant species covered by the MSHCP would be at less than significant levels under CEQA. However, the MSHCP EIR/EIS concluded that impacts to plant species not covered

by the MSHCP would not be mitigated and would, therefore, remain significant under CEQA.

Build Alternatives

The MCP Build Alternatives would contribute to the incremental loss of areas of long-term conservation value for smooth tarplant and Coulter's goldfields. Specifically, for the base case and the SJN DV, all MCP Build Alternatives would result in 2.72 acres of direct impacts to areas of long-term conservation value for smooth tarplant and 1.99 acres of direct impacts to areas of long-term conservation value for Coulter's goldfields. For the SJRB DV, impacts of all the MCP Build Alternatives to areas of long-term conservation value would be 2.73 acres for smooth tarplant and 2.25 acres for Coulter's goldfields.

Two of the larger cumulative projects in the MCP study area are the proposed Specific Plan for The Villages of Lakeview and the SR-79 Realignment Project. According to the original Final EIR for The Villages of Lakeview Specific Plan, that project would result in direct impacts to paniculate tarplant, a special-status plant species not covered by the MSHCP. However, because this species is not threatened or endangered, its range is sufficiently broad, and it is known to exist in other areas near that project site, the Final EIR for The Villages of Lakeview Specific Plan concluded that the direct loss of this plant is considered less than significant under CEQA, and no mitigation was required. No other Non-Covered species would be impacted by The Villages of Lakeview Specific Plan. Mapped populations of Coulter's goldfields, smooth tarplant, and thread-leaved brodiaea, all species afforded coverage by the MSHCP, would be avoided and preserved.

According to the Draft EIR/EIS for the SR-79 Realignment Project, that project would directly impact up to the following numbers of individual plants: 6 Davidson's saltscale, 2 Plummer's mariposa lily, 130,800 smooth tarplant, 112,566 Parry's spineflower, 4,616 long-spined spineflower, 8,425 vernal barley, 5,435 Coulter's goldfields, 10,000 little mousetail, 21,383 paniculate tarplant, and 79,124 Robinson's peppergrass. Davidson's saltscale, Plummer's mariposa lily, smooth tarplant, Parry's spineflower, long-spined spineflower, vernal barley, Coulter's goldfields, and little mousetail are Western Riverside County MSHCP covered species; therefore, impacts to these species would be covered under the Western Riverside County MSHCP. Paniculate tarplant and Robinson's peppergrass are not included in the Western Riverside County MSHCP. However, according to preliminary studies, impacts to paniculate tarplant would not be substantial, and no mitigation would be required.

The impacts to Robinson's peppergrass would also not be substantial, and no mitigation would be required.

As stated previously, the MCP Build Alternatives would contribute to the incremental loss of areas of long-term conservation value for smooth tarplant and Coulter's goldfields, which are Covered Species under the Western Riverside County MSHCP. As a regional plan, the Western Riverside County MSHCP serves to provide mitigation for cumulative impacts to sensitive plant species and their habitats. The MCP project would comply with the requirements of the MSHCP. Project consistency with the MSHCP would ensure that the cumulative impacts are effectively mitigated; therefore, additional mitigation for cumulative effects of the MCP project to sensitive plant species is not warranted.

No Build Alternatives

Alternative 1A would generally result in less impacts to plant species than any of the proposed MCP Build Alternatives because the MCP project would not be built, and no improvements would be made to Ramona Expressway. Alternative 1B would generally result in fewer impacts than the MCP Build Alternatives since it would widen Ramona Expressway, and the MCP project would not be built.

3.25.5.10 Animal Species

The cumulative study area for animal species is western Riverside County. Historically, the health of this resource has become degraded by development over time. Since its approval in 2004, implementation of the western Riverside County MSHCP allows for development of covered activities while maintaining the health of this resource by providing for conservation of species and habitats and a coordinated system of linkages that provide for wildlife connectivity between conservation areas.

The MSHCP provides guidelines that would avoid and minimize impacts to sensitive animal habitats known to occur in the vicinity of planned development and planned roadways while permitting continued development and the construction, operation, and maintenance of roadways. The MSHCP EIR/EIS concluded that because of features incorporated into the MSHCP and the additional mitigation measures included in the EIR, impacts to animal species would be reduced to less than significant levels under CEQA.

Build Alternatives

The MCP Build Alternatives would contribute to the incremental loss of between 44.07 and 44.26 acres of habitat with long-term conservation value for the Los

Angeles pocket mouse, depending on the alternative and design variation. As described in Chapter 2, the habitat loss for Los Angeles pocket mouse was reduced to 20.85 acres for the preferred alternative (Alternative 9 Modified with the SJRB DV). The habitat impacted by the MCP project would also be impacted by approved development projects near the San Jacinto River and the SR-79 Realignment Project. Per the MSHCP, proposed inclusion of approximately 32,581 acres (62 percent) of suitable habitat for this species in the MSHCP conservation area would minimize cumulative impacts to the species.

In addition, the MCP Build Alternatives would contribute to the incremental loss of 3.1 acres of burrowing owl foraging habitat and burrows occupied by one burrowing owl. Mitigation for impacts to the burrowing owl would be achieved through project consistency with the MSHCP. The MCP Build Alternatives would also directly impact existing bridges and larger culverts that may provide maternity roosts and foraging roosts for bat species. Inclusion of suitable Conserved Habitat into the MSHCP Conservation Area would also provide habitat for non-MSHCP covered species.

Two of the larger cumulative projects in the MCP study area are the proposed Villages of Lakeview Specific Plan and the SR-79 Realignment Project. According to the original Final EIR for The Villages of Lakeview Specific Plan, that project would result in the loss of foraging habitat and potential breeding habitat for burrowing owl, raptor foraging habitat, 65 acres of habitat for the Bell's sage sparrow, and 0.49 acres of Los Angeles pocket mouse habitat with long-term conservation value. According to the Draft EIR/EIS for the SR-79 Realignment Project, that project would result in permanent impacts to bat roosting habitat; 6.7 acres of Los Angeles pocket mouse habitat; and up to 7 pairs of burrowing owls, 4 pairs of barn owls, 1 pair of Cooper's hawk, 10 pairs of red-tailed hawk, and 5 pairs of white-tailed kite.

As a regional plan, the Western Riverside County MSHCP serves to provide mitigation for cumulative impacts to sensitive animal species and their habitats. The MCP project and other cumulative projects would comply with the requirements of the MSHCP. Project consistency with the MSHCP would ensure that the cumulative impacts are effectively mitigated; therefore, additional mitigation for cumulative effects of the MCP project to sensitive animal species is not warranted.

No Build Alternatives

Under Alternative 1A, because Ramona Expressway would remain as it is today, there would be no permanent impacts to animal species along that roadway under this alternative. Therefore, impacts to special-status animal species in the vicinity of Ramona Expressway would be less for Alternative 1A than for the MCP Build Alternatives.

Under Alternative 1B, the Ramona Expressway would be widened and permanent impacts to special-status animal species would be expected to be less than that for the MCP Build Alternatives.

3.25.5.11 Threatened and Endangered Species

The cumulative study area for threatened and endangered species is western Riverside County. Historically, the health of this resource has become more degraded by development over time. Threatened and endangered species and their habitats are protected under the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402 and the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. Project proponents are required to consult with the USFWS and CDFW to ensure that they do not jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat for listed species.

Build Alternatives

Section 3.21, Threatened and Endangered Species, discusses whether the MCP project would have a "no effect" or "may affect, likely to adversely effect" determination under FESA. Cumulative adverse effects could occur to species with a "may affect, likely to adversely effect" determination; these species are discussed in this section.

The MCP project "may affect, likely to adversely affect" San Jacinto Valley crownscale and spreading navarretia. The MCP project would directly impact 0.36 acres of San Jacinto Valley crownscale and 1.09 acres of spreading navarretia within the MSHCP-designated survey areas for these species.

There will be minimal impacts to coastal California gnatcatcher. The MCP project "may affect, likely to adversely affect" the coastal California gnatcatcher. Impacts may include loss of potential habitat and habitat fragmentation.

The MCP project "may affect, likely to adversely affect" the least Bell's vireo. Impacts may include loss of occupied habitat. There is one pair of least Bell's vireo along the San Jacinto River, west of Sanderson Avenue. Impacts to least Bell's vireo habitat would be 3.66 acres for the MCP project. Based on typical territory sizes in California, it is estimated that one to two least Bell's vireo pairs may occur within the riparian habitat in addition to the pair observed in 2008.

The MCP project "may affect, likely to adversely affect" the San Bernardino kangaroo rat. Impacts may include loss of potential foraging habitat, edge effects such as exotic plant and animal infestations, litter, fire, and unauthorized recreational use, and pollutants associated with vehicle use of the freeway. Additional indirect effects may result from an increase in light, glare, and noise associated with vehicles and daytime and nighttime construction activities. The MCP project will directly impact 4.25 acres of San Bernardino kangaroo rat occupied habitat.

The MCP project "may affect, likely to adversely affect" the Stephens' kangaroo rat. This species is known to occur in the Reserve lands of the Habitat Conservation Plan for the Stephens' Kangaroo Rat, and may also occur in other areas of the biological study area (BSA). The project runs along the boundary of the San Jacinto Wildlife Area (a Core Reserve of the Habitat Conservation Plan for the Stephens' Kangaroo Rat) for approximately 1.5 mi along the common alignment of all MCP Build Alternatives and design variations. However, small mammal trapping efforts for the San Bernardino kangaroo rat and the Los Angeles pocket mouse did not result in any Stephens' kangaroo rat captures along and adjacent to the San Jacinto Wildlife Area. Impacts to this species may include loss of potential foraging habitat, edge effects such as exotic plant and animal infestations, litter, fire, and unauthorized recreational use, and pollutants associated with vehicle use of the freeway. Additional indirect effects may result from an increase in light, glare, and noise associated with vehicles and daytime and nighttime construction activities.

Two of the large cumulative projects in the MCP study area are the proposed Villages of Lakeview Specific Plan and the SR-79 Realignment Project. According to the original Final EIR for The Villages of Lakeview Specific Plan, that project would impact habitat for the Stephen's kangaroo rat and coastal California gnatcatcher. According to the Draft EIR/EIS for the SR-79 Realignment Project, that project would result in permanent impacts to 1.79 acres of habitat occupied by vernal pool fairy shrimp, and up to 331 acres of critical habitat for spreading navarretia, 356.8 acres of Stephens' kangaroo rat habitat, 6,548 San Jacinto Valley crownscale, 101.41

acres of coastal California gnatcatcher suitable habitat, 593 acres of Quino checkerspot butterfly suitable habitat, and 4,266 acres of California orcutt grass.

Combined with cumulative projects, the MCP project would contribute to the incremental loss of potentially suitable habitat for Stephens' kangaroo rat and California gnatcatcher, and occupied habitat for San Jacinto Valley crownscale, spreading navarettia, San Bernardino kangaroo rat, and least Bell's vireo. The MCP project and other cumulative projects would comply with the requirements of the Western Riverside County MSHCP and Habitat Conservation Plan for the Stephens' Kangaroo Rat, which as regional plans serve to provide mitigation for cumulative impacts to threatened and endangered species and their habitats. Project consistency with the Western Riverside County MSHCP and Habitat Conservation Plan for the Stephens' Kangaroo Rat would ensure that the cumulative impacts are effectively mitigated. In addition, cumulative projects would undergo review by the USFWS and the CDFW to ensure that they do not jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Therefore, additional mitigation for cumulative effects of the MCP project to threatened and endangered animal species is not warranted.

No Build Alternatives

Under Alternative 1A, the planned street network would be constructed, except for improvements to the Ramona Expressway. Because the Ramona Expressway would remain as it is today, there would be no permanent impacts to threatened and endangered species along this roadway under Alternative 1A. Alternative 1A would generally result in fewer impacts to threatened, endangered, and candidate species than the MCP Build Alternatives because the MCP project would not be built and no improvements would be made to the Ramona Expressway.

Under Alternative 1B, the planned street network would be developed according to the Circulation Element of the Riverside County General Plan, including improvements to Ramona Expressway. Alternative 1B would generally result in fewer impacts than the Build Alternatives because the Ramona Expressway would be widened and the MCP project would not be built.

3.25.6 Summary

In summary, the MCP project would not contribute to cumulative adverse impacts related to community impacts/relocations and visual/aesthetics. Potential direct project impacts to the resources for these environmental topics discussed above from

the project are addressed with avoidance, minimization, and mitigation measures identified in Sections 3.3 and 3.7. These measures are expected to fully offset the effects of the MCP project on these resources.

Although some amount of growth has already been planned to occur in the MCP project area, the MCP project is expected to have some influence on the location, amount, rate, or type of growth in the area.

The MCP project, when combined with the other anticipated cumulative projects, would contribute to a cumulative loss of farmlands, cultural resources, paleontological resources, natural communities, wetlands and other waters, plant species, animal species, and threatened and endangered species. Anticipated cumulative impacts include the permanent loss of farmlands, the loss of several cultural resources, and the continued destruction and recovery of paleontological resources as a result of excavation associated with construction of the MCP and other future land development and infrastructure projects.

The MCP project, when combined with the other anticipated cumulative projects, would contribute to a cumulative increase in noise within the MCP study area. Noise abatement (sound walls) will be provided where feasible and reasonable as discussed in Section 3.15, Noise and Vibration, to address noise impacts of the MCP project. Noise impacts related to land use projects in the MCP study area would be addressed through project compliance with local noise policies and ordinances.

Cumulative impacts to natural communities, plant species, animal species, and threatened and endangered species will be mitigated through compliance by RCTC and other permittees with the Western Riverside County MSHCP. Cumulative impacts to wetlands and other waters will be mitigated through compliance by RCTC and other agencies with the Western Riverside County MSHCP and with permitting conditions of the USACE, the RWQCB, and the CDFW. For cultural resources, mitigation for cumulative impacts, in addition to direct and indirect impacts are defined in the Memorandum of Agreement provided in Appendix U. For paleontological resources, RCTC will work with those agencies responsible for approval of the cumulative projects to provide information on these resources from the MCP project that may be useful to those agencies in mitigating impacts to those resources. The cumulative loss of farmlands has been previously acknowledged by the County and the Cities of Perris and San Jacinto as an unavoidable adverse impact resulting from the planned growth within western Riverside County.